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THE DEVELOPMENT OF CAREER ACTIVITIES

FOR FOURTH GRADE STUDENTS

by

Barbara P. M. Southwick

A seminar report submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF EDUCATION

in

Psychology

Approved:

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Barbara P. M. Southwich

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INTRODUCTION

Statement of the Problem

Today's youth have few real contacts with the work world and have little knowledge of what is expected from them. Many grade school youngsters are not aware of the type of work their parents are doing. Some do not even know where their parents work. It is difficult for most elementary students to see the relationship between their present school activities and their future life. And all too often, students can not express personal goals or plans.

As students become more aware of the world of work, they should be better prepared to enter it and they should also develop an appreciation of work and a self-concept that leads to a more fruitful and satisfactory life.

Burkett (1972) reports that among other proposals in his 1972 State of the Union Address, President Nixon recommended that major emphasis be placed this year on career education and new ways to finance education. The emphasis on career education grows out of what President Nixon called his "belief that schools should be doing more to build self-reliance and sufficiency, to prepare students for a productive and fulfilling life." He says that too many students are "turning off" and "tuning out" on their present educational experiences. The President does not see career education as a specific program, commenting that it could be more usefully thought of as a goal for education that could be pursued

through many methods. He described it as a plan to "provide people of all ages with broader exposure to and better preparation for the world of work."

The career development approach is underway to some degree in every state in the Union, largely through the efforts of the United States Office of Education. It is growing in prominence in local systems and has indeed become a top priority item nationally under Commissioner Sidney P. Marland. Each state has been asked to undertake plans (with federal funds) for one or more career education projects of its own. Commissioner Marland (1972) plans that pupils in the first six grades would become familiar with the career clusters through instructional materials, field trips, and the kinds of teaching approaches now used to compliment courses in basic language, social studies, science, and mathematics. He also encourages teachers of all subjects to learn new techniques on relating their work to career education purposes. The program is expected to enhance the quality of learning in the academic subjects as a result of more realistic motivation.

Our Utah State Board of Education Position Paper on Career Education (May, 1972) states in item number one that "The kindergarten through sixth grade program will be revised to include career awareness dealing with the development of proper attitudes, appreciations, and understandings in the World of Work."

The occupational choice has far reaching and long lasting effects upon the life of the individual.

The choice of an occupation is usually one of the most important decisions a person makes in his lifetime. To

choose a vocation is actually to choose a way of life... It can affect his health, physical and mental. It will partially determine his values, and it will influence his manner of speech, his dress, and even his leisure-time activities. It will tend to determine where his family lives, whom they meet, and where his children go to school. In short, it will affect his whole social and economic status (Norris, 1969).

Hill and Luckey (1969) feel that "The complexity of occupational decision-making has so increased that young people now need help with their planning, help which was once not needed."

Arbuckle (1964) recommends that "Occupational information has a claim to a place in the elementary school curriculum just as any other information and knowledge." He then reminds us that a young child's current life is his "world of work" and that career development activities should be used to help a child become involved in the learning process.

Many parents do not understand the career development process well enough to help their own children. Some parents are unconcerned about careers for their daughters; yet, the United States Department of Labor tells us that nine out of ten women will work some time during their lives. Students from disadvantaged homes have limited opportunities for career exploration. A career development program in the elementary schools could assist with these concerns as well as stimulate the guidance processes that occur in the homes of the advantaged youth.

Every child has a right to acquire his own realistic self-evaluation of many fields of work. Exposure to occupational information should be permitted and encouraged to start at an early

age. From this point of view, we need to foster concepts and techniques designed to facilitate his career development from his earliest interests. Interaction with counselors, teachers, parents, and community can increase the student's ability to understand the world of work as it relates to his aptitudes and interests and values and to enable him to be more aware of the facets of his own career development. Considering the need for early exposure to occupational information -- the problem is -- that the elementary teachers and students of the Box Elder County School District have not had and are handicapped without guidelines and suggestions for implementing a career orientation and exploration program.

Purpose and Objectives

The purpose of this study is to design a career development program that will help fourth grade children to better understand themselves and the world of work.

The objectives of this study are to write learner expectations and learning activities developed under the broad envelope of the State Guide for Career Education.

Methods of Procedure

The learner expectations and learning activities prepared in this study will be designed for use with normal fourth grade students in the Box Elder County Schools.

Career information materials published in Utah and other states, along with teacher editions of the classroom texts, self-understanding

publications, and occupational information books will be used as resource material for useful ideas and suggestions in developing a career education program for fourth grade youngsters.

Limitations

This study is limited to the preparation of materials intended for use with fourth grade students. It is not intended that this study implement or evaluate the program. The material developed for fourth grade is defined as needed by the Utah State Department of Education. Other states and other individuals may see a broader or a more narrow focus for fourth grade children.

Definition of Terms*

Awareness: An initial recognition of concepts relative to the career education process.

Behavioral Objectives: A performance objective having (1) an identifiable goal which identifies the learner, (2) the process or learning activity, and (3) implies some type of learner behavioral change that can be evaluated as a direct outcome of the goal.

Career: The sequence of occupations, jobs, and positions in the life of an individual. Includes activities outside of job and denotes a kind of general life pattern system.

Career Development: Continuous life-long formulation of a

*as defined in the Utah State Guide for Career Education.

viable self concept through education, work, and leisure.

Career Education: A utilization of techniques including individual, group counseling and a variety of media for the dissemination of occupational information and modifications of existing curriculum to meet students' needs. Career Guidance assists the student in career planning and decision-making; enables the student to view life styles and personal satisfactions; and investigates education, work and leisure alternatives.

Community: What is commonly referred to as a town or city with all the inherent components.

Concepts: Major ideas, thoughts or notions identified as essential to the career development process.

Decision-making: The utilization of value judgements about information in choosing alternative course of action and means for implementation.

Developmental Objective: An intermediate step between concepts and behavioral objectives written to describe essential career experiences in the growth process of an individual.

Exploration: An expansion and thorough examination of concepts relative to the career education process of which one has become aware.

General Education: Educational curriculum from kindergarten to the twelfth grade with the exception of special education and

vocational education.

Learning Activity: That activity specified to produce the desired behavioral objectives.

Occupation: A term referring to a person's regular work, business, or means of earning a living.

Occupational Cluster: Describes occupations which are related and grouped according to similarities.

Self and Others: Perception of one's self in relationship to his individual characteristics and the relationship he has with others within his intervening environment.

Subject Areas: Curriculum areas forming a nucleus of general vocational and academic education.

Vocation: Synonymous with "occupation." Frequently incorrectly used to refer to skilled worker's position and, therefore, occupations is the preferred term.

Work and Leisure: Work is activity calling for the expenditure of an effort toward some definite achievement or outcome. Leisure is freedom from required effort usually interpreted as time not spent on the activities of working and living. Reward is in the doing rather than on the end product.

CAREER EDUCATION ACTIVITIES FOR FOURTH GRADE STUDENTS

Concept I

An individual should understand and accept self and others as it affects career development.

Developmental Objective

Exploration 4-6.

- 1.6: To assess and understand self in the areas of learning accomplishment, feelings about self, and how he relates to others.

Learner Expectations

Before the class, the student will orally give two examples about each of the following:

1. How I feel about myself now.
2. How well I relate to others.
3. What I have learned as a fourth grader.

Suggested Activities

- A. The students can make booklets titled "Who Am I?" The booklets are assembled containing snapshots of child, family, and other desired pictures. Divide the booklet into three sections:
- (1) Learning Accomplishments (to include pre-school and school learning such as walking, talking, reading, writing, etc.),
 - (2) My Feelings (this section could include past and present

feelings, as well as feelings about the future and could include embarrassing moments, failures, successes and happy moments, and (3) Getting Along With Others (this could include times and ways of getting along or not getting along with others).

- B. The student will keep a diary for one week putting down "good thoughts" and "bad thoughts" about himself. (The child will be assured that no one will see the diary.) As a follow-up, some of these items will be used in a piece of writing called "Me, the Good Guy."
- C. The child will keep a scrapbook of articles and pictures from newspapers and magazines. The articles and pictures supposedly would reflect the abilities and interests of the child as he sees himself.
- D. The child will write anagrams using the letters of his first and/or last name. This activity can serve several purposes. One direction may be: "Take the letters of your first name and think of action words (verbs) that apply to you."

Examples: Mary -----	<u>Manage</u>	Ned -----	<u>Nibble</u>
	<u>Arrange</u>		<u>Exchange</u>
	<u>Rescue</u>		<u>Deliver</u>
	<u>Yawn</u>		

A higher level of activity would be to use these words in sentences that apply to the child. Example: "I yawn when I am sleepy."

- E. The class will play "Listen for Feelings." The class will make a list of words to describe feelings. Examples: glad,

amazed, afraid, proud, pleased, discouraged, lonely, guilty, uncertain. With the list on the chalkboard, each child will be asked to give the class a message to see if the class will recognize his feelings by the words he uses. Illustration for a happy or satisfied feeling: "Look, Tom, I made a very good horse with my clay." Encourage each child to give an illustration using a different feeling.

- F. For feedback from others, the class will divide into small groups. The small groups will discuss and keep notes on ways that each can improve his ability to get along well with others. The same group may meet a week later to hear each one report to the group one way in which he feels he has made improvement.
- G. The children will look up in the dictionary and write definitions for these terms: ability, achievement, and interest.
- H. As a group, the class will list on the chalkboard Abilities, Achievements, and Interests of the class members.
- I. The child will keep a notebook for two weeks noting activities in which he was successful and which he especially liked.
- J. The child will write synonyms and antonyms for the words: ability, achievement, and interest.

Example: Ability -- what it takes

Interest -- like

The child will then use these words in complete sentences to describe attributes of himself. Example: "I have the ability

to sing well."

Notes to Teachers

1. The students may want to discuss and adopt as a class the slogan:

"Don't wait to be a great man or a great woman, be a great kid and always be your best self!"

2. This suggested resource material is appropriate with Suggested Activity A:

Who Do You Think You Are? (Filmstrip)
Guidance Associates
Pleasantville, New York 10570

Time For Poetry, by Arbuthnot, "As Long as I Live"

A Book About Me SRA

3. Outline of Needs (helpful in understanding self). (From All About You by William C. Menninger, M.D., Junior Guidance Series, Chicago, Illinois: SRA, 1955, pp. 22-28.)

I. What are our needs?

- A. Physical: air, water, food, shelter.
- B. Emotional: affection, acceptance, success.
- C. Some also feel that the need for adventure is important.

II. Affection -- we want to be liked.

- A. Children in orphanages without close contact with some mother-figure have been known to die, simply from lack of affection or contact.

III. Acceptance -- we want to belong.

IV. Success -- we want to be successful.

A. We feel badly when we know we could have done better than we did.

B. Accomplishing something makes us feel happy.

V. Adventure -- we want adventure, change.

A. Even though shy, many of us may look forward to going to camp in the summer, visiting out of town, learning a new game, or getting out of the house and "doing" something.

B. Everyone gets tired of the same old thing day after day. By the need to try new things and new ways of doing, we learn to grow.

4. Possible ways of developing this unit:

A. Hold individual sessions with each child to consider his past achievements and current abilities and limitations.

B. Give the class a teacher-made test which measures skills in several areas.

5. Ability -

Synonyms: capacity, capability, talent, faculty, qualification, aptitude, skill, efficiency, power, dexterity, aptness.

Antonyms: inability, incapacity, incapability, imbecility, unreadiness, stupidity, incompetency, inefficiency.

Achievement -

Synonyms: exploit, feat, accomplishment, attainment, performance, acquirement, gain.

Antonyms: failure, loss.

Interest -

Synonyms: concernment, like.

Antonyms: indifference, unconcerned.

6. Additional activities a teacher could use with this unit to study "self":
 - a. Use animated films, puppet shows, books and graphs to provide a basis for identifying parts of the body and teaching vocabulary words.
 - b. Ask each student to look into a full length mirror and describe his appearance.
 - c. Compile a chart of the weights and heights of each child in the class.
 - d. Have each child draw a picture of himself from a mirror image or a poloroid snapshot.
 - e. Make an audio recording of the class and ask each individual to identify his voice.
 - f. Using a picture of himself, ask the child to describe aloud his appearance using accurate descriptors.
7. The students should be encouraged to talk about and label their own feelings in their own life experiences, then see if they can decide why they felt as they did.

8. Feelings Inventory

Your Name _____ What is your grade? _____

How old are you? _____ Are you a boy or a girl? _____

Date _____

- | | | | |
|-----|--|-----|----|
| 1. | Is most school work interesting? | Yes | No |
| 2. | Do you feel important in school? | Yes | No |
| 3. | Do you feel you lose out if you miss school? | Yes | No |
| 4. | Do you waste a lot of time? | Yes | No |
| 5. | Are you often unhappy in school? | Yes | No |
| 6. | Are you sometimes permitted to help others with
their work? | Yes | No |
| 7. | Do you only study for subjects you like? | Yes | No |
| 8. | Are you praised when you do good work? | Yes | No |
| 9. | Is your school room a happy place? | Yes | No |
| 10. | Do you like to stay out of school? | Yes | No |
| 11. | Does it seem that you always do poor work? | Yes | No |
| 12. | Do you get help when you do not know something? . . | Yes | No |
| 13. | Do you often have too much homework? | Yes | No |
| 14. | Are you proud to be in your school room group? . . . | Yes | No |
| 15. | Do you sometimes talk and joke with your teacher? . | Yes | No |
| 16. | Is there always something wrong with your work? . . | Yes | No |
| 17. | Could you do better in school? | Yes | No |
| 18. | Are you happy with the way you are doing in
school? | Yes | No |
| 19. | If you wanted to, could you do better work than
you do? | Yes | No |
| 20. | Do most of the pupils do better work than you do? . | Yes | No |
| 21. | Do you wish you were out of school for good? | Yes | No |
| 22. | Do you learn things about as fast as others in
your class? | Yes | No |
| 23. | Do your mother and father think that you are
getting along all right in school? | Yes | No |
| 24. | Does no one really care how you do in school? . . . | Yes | No |
| 25. | Do you complete what you start? | Yes | No |

9. The alarming incidence of emotional instability coupled with the mounting pressures to which groups in our society are being subjected, points to the need for educational programs which contribute positively to the mental health of all students. Each individual must be helped to develop these capabilities which

assist him in recognizing emotional problems and in dealing with them effectively.

An individual who is achieving this objective is one who:

- a. has a feeling of personal worth and a positive self-image.
- b. has accurate insights as to his own capabilities and limitations and makes wise adjustments in terms of these realities.
- c. has insights into life's realities and makes adjustments in terms of correcting those which he can change and accepting those which he is powerless to alter.
- d. has an emotional life dominated by positive, healthful emotions such as love, hope, enthusiasm, joy, excitement, contentment.
- e. knows the roles of emotions in his own life and in his interactions with others and is skillful in adjusting to these roles in a positive way.
- f. finds emotional release and rejuvenation by participating in hobbies, service, recreational, and aesthetic activities.

Concept II

The individual should learn to be self-governing in order to be prepared for work.

Developmental Objective

Exploration 4-6.

- 2.4: Understand that he is responsible for his own career planning.

Learner Expectations

As a member of a panel, the student will make a five minute presentation telling what his first career choice would be and the plans needed for him to achieve it.

Suggested Activities

- A. Each student will choose an occupation in which he is interested, write a job description of same, and express this occupation through pantomime. Occupational tools, etc. could be used to assist in the pantomime. Following the pantomime the student should share, with the class, the job description he has written.
- B. Divide the class into groups of eight. One person in each group is chosen to be the "employer." The total group discusses and formulates a set of questions needed for an employer to use as he interviews each "applicant." Have the "employer" report to the class whom he "hires" and tell his reasons.
- C. Play "What's My Line." (See Notes to Teachers.)
- D. Circle Game: "If I become an (auto mechanic) I'll need (to have an auto mechanic's training class). The first person in the circle names a job and each one in turn tells one thing

needed to become or used to become such. As it becomes a person's turn he must name all previous answers and add one of his own.

- E. Each student plans what he wants to be and writes out the steps needed to achieve his plan; then submits it to two other classmates for criticism and suggestions for improving his plan.

The student may need teacher guidance in the following areas:

1. List of occupations.
2. Discuss with the student his skills, aptitudes and interests.
3. Help him get accurate information.
4. If necessary, help him make a reasonable decision.

- F. Invite several resource persons to relate to the class the training steps each went through to become qualified for his particular job. (See Notes to Teachers #5.)

Other helpful information for teaching this unit is found in Notes to Teachers.

Notes to Teachers

1. Influencing determinants in career planning:
 - a. health factors -- physical, emotional, mental
 - b. disposition
 - c. his own ability and potential
 - d. parent or significant adult influence
 - e. peers
 - f. economic level

- g. social status
- h. good/bad fortune

2. Characteristics of a Good Worker: (These characteristics can be discussed with the children, relating them to the students' present "World of Work.")

- _____ 1. Good health.
- _____ 2. Neatness, orderly, punctual.
- _____ 3. Enthusiasm.
- _____ 4. Show initiative.
- _____ 5. Finish what you start.
- _____ 6. Follow a schedule.
- _____ 7. Make up work missed.
- _____ 8. Practice larger vocabulary.
- _____ 9. Do better today than you did yesterday.
- _____ 10. Think about what you are doing.
- _____ 11. Know what you are doing -- ask directions.
- _____ 12. Be active in classroom activities.
- _____ 13. Use what you are learning.
- _____ 14. Realize you are not always right.
- _____ 15. Have opinions and talk about them.

Activity: Have each child rate himself on each of these:

Excellent

Good

Poor

3. Personal Qualifications

Age _____ Height _____ Weight _____
Eyesight _____ Hearing _____ Health _____

1. Are you likeable?
2. Are you energetic?
3. Are you dependable?
4. Do you complete assignments?
5. Are you always on time?
6. Are you clean and neat in your work and personal appearance?
7. Are you willing to work hard?
8. Do you complain a great deal?
9. Do you always make excuses for mistakes?
10. Can you follow directions?
11. Do you learn from mistakes?
12. Do you work well with others?
13. Are you proud of your work?
14. Do you ask for information and suggestions when necessary?
15. Do you like to plan your work?

List six qualities which you possess which lead you to think that someone might want to hire you?

_____	_____	_____
_____	_____	_____

4. Job Study Sheet

Answer the following questions:

1. What type of personality would be best for this job?
2. What are some of the specific interests that are involved in the job? For example: outdoor, mechanical, computational, scientific, persuasive, artistic, literary, musical, social service, and clerical.
3. Does the job involve a wide variety of activities? (Things to do?)
4. What school subjects or courses are desirable as preparation for this job?
5. What abilities and skills are required for the job? (What must he be able to do, to do this job?)
6. What responsibilities does the worker have? (What does he do?)
7. What are some of the working conditions? (What's it like where he works; are there odd hours, unusual conditions?)
8. How much money would the worker make when first employed?
9. What are some disadvantages of this job?
10. What education is needed for preparation for this job?

Write how you think you would feel if you were doing this job and tell why.

5. Resource Persons Job Data

Dear _____:

Students in the fourth grade are studying about occupations.

We are very interested in the work that you do at your job.

Below are listed some areas that we would like to have included in your talk to the class.

1. Title of job.
2. Duties on the job.
3. Training steps or preparation required for present job.
4. Approximate starting salary -- salary after ten years (average).
5. Have you been doing this same type of work all of your working life?
6. Demand for such a job.
7. Supply of workers for this occupation.
8. Physical characteristics needed.
9. Social characteristics needed.
10. Do you work alone or with others?
11. Do you need to get along and cooperate with other workers?
12. What school courses helped a great deal in preparing you for this work?
13. How do you feel after a day's work? Why?
14. Why do you work?
15. Do you like this job?
16. What are the good and bad points about it?
17. How and where training can be obtained.
18. Leave time for questions.

Thank you very much for consenting to spend some time with our class.

Sincerely yours,

Teacher

6. Rules for "What's My Line?" (Granger, 1972)

For Contestant:

1. Choose an occupation.
2. Give to the panel moderator a brief, written, description of what kind of work a person in this occupation would have -- salary, working conditions, location of job, and education and/or training required.
3. You may answer panel's questions only with a "yes," "no," "maybe," or "I don't know." If you have a question as to the correct answer to give to the panel, you may converse with the panel moderator.
4. You must tell the truth.

For Panel:

1. Take turns asking questions of the contestant which require only a "yes" or "no" answer.
2. The entire panel may only ask a total of 20 questions.
3. You are attempting either to discover the title of the job or to briefly describe the type of work being done.
4. If you cannot think of an appropriate question, you may pass and give your turn to the next panel member.
5. It may help the panel discover the occupation if they will begin asking broad questions and then become more specific.

For example:

"Do you work more indoors than outdoors?" "Yes."

"Do you work only indoors?" "Yes."

"Would your work be done more in the city than the country?" "Yes."

"Is your work very creative?" "No."

"Would you earn less than \$10,000 a year, starting salary?" "Yes."

"Does your work require a college education?" "Yes."

"Do you work in the clerical field?" "No."

"Medical field?" "Yes."

"A nurse." "Yes!"

For Panel Moderator:

1. You are to see that appropriate questions are asked, and correct answers are given.
2. You are to keep track of the number of questions which have been asked. Only 20 may be asked.
3. If the panel guesses the occupation, the panel receives ten points. If they are unable to guess, the contestant receives ten points.
4. Keep track of the points given to each person. (Each person on the panel will receive ten points if the panel guesses the occupation.)
5. Do not allow the panel to take too much time trying to think of questions.

Concept III

Work has dignity as it contributes to society.

Developmental Objective

Exploration 4-6.

- 3.10: To develop an understanding that the wage earner and his occupations are important to the worker and the community.

Learner Expectations

Upon completion of a job survey and following an evaluation of the findings with the survey group, each member will report to the class one of his findings, telling how he is directly affected by the work of different wage earners in the community.

Suggested Activities

- A. Group the students in the class and have them conduct a community survey in assigned areas about the kinds of jobs people have. Students should formulate a chart or questionnaire to use. The following example may be helpful:

Name of job _____		
How does his work help the community? _____		

List its basic requirements of the worker:		
1. _____	2. _____	3. _____
How does the worker like it? A little Average A lot		
List any reasons why the worker would desire a change.		
1.		
2.		
3.		

- B. Write letters of inquiry to a variety of community workers asking for information relative to the work they do and how it benefits the community.
- C. Read easy biographies of successful men and women and report on how they made important contributions to the lives of others.
- D. The students could make thorough investigations of occupations of their parents, listing (a) why the work is important to the parent as a wage earner, and (b) why the occupation is important to the community.

Notes to Teachers

1. It would be an ideal program if students could be appropriately placed for on-the-job observing with a competent workman for at least a half-day period.

A teacher must be aware of the implications of such a plan; clearance in all areas is needed.

- a. State School Regulations
 - b. Local School District approval, scheduling and supervision
 - c. Employer cooperation
 - d. Parent cooperation
 - e. Student preparation
2. It may be necessary for teachers to review the fundamentals of survey: techniques and evaluation, and tabulation of survey results.

3. Consult the school librarian for recommended biographies.
(Inquire about the Landmark series.)

Concept IV

An individual works to satisfy personal and social needs.

Developmental Objective

Exploration 4-6.

- 4.3: Develop an understanding that one's individual needs
change as he progresses through life.

Learner Expectations

Using the outline, "Man's Basic Needs" in Notes to Teachers, the student will choose one of nine major areas and describe in writing two ways in which the student's needs have changed from the time he was a year old to the present time, also making a list of no less than five of the needs he thinks he will have approximately ten years hence.

Suggested Activities

- A. The teacher will have students make a list of their needs and show how these needs may be met by a career. The student's list may look like this:
 1. Need for food
 2. Need for clothing
 3. Need for shelter
 4. Need for health
 5. Need for friends

When this list is completed, the students will indicate the careers that will fulfill those needs.

- B. Ask one of the parents to come to the classroom and make a shirt from the pattern stage to the finished garment, sewing it where the children can observe the progress and ask questions. Compare how sewing a garment was done in "olden times" to today's mass produced machine-made clothing. Needs change as we grow; we need larger clothes.
- C. List the job assignments you have been given in order of difficulty, beginning with the first small chore to the hardest job you now have to do and tell (1) why your responsibility increased, and (2) how your efforts filled a need.
- D. The class will discuss how an individual's needs would change as he progressed from apprentice to manager of a business.
For example:
 - 1. Take more responsibility.
 - 2. Know more about the business.
 - 3. Know how to supervise and manage workers.
 - 4. May have to dress better.
- E. The class could discuss how a person's needs change as the person changes jobs requiring him to move to another community.
- F. The students will gather and bring to class manufacturer's advertisements, articles, newspaper clippings. The student can then be asked to share his information with the class and

tell how it relates to one of the nine areas of "Man's Basic Needs" in Notes to Teachers.

- G. Using the outline, "Man's Basic Needs" in Notes to Teachers, the student will choose one of nine major areas and write how the needs of his parents as children compare with the same needs which the student has today, emphasizing the difference.

Notes to Teachers

1. Man's Basic Needs (Payne, 1969)

I. Man as a necessary part of a culture group

A. Technology

1. Tools
2. Fire
3. Food
4. Shelter
5. Clothing

B. Social Institutions

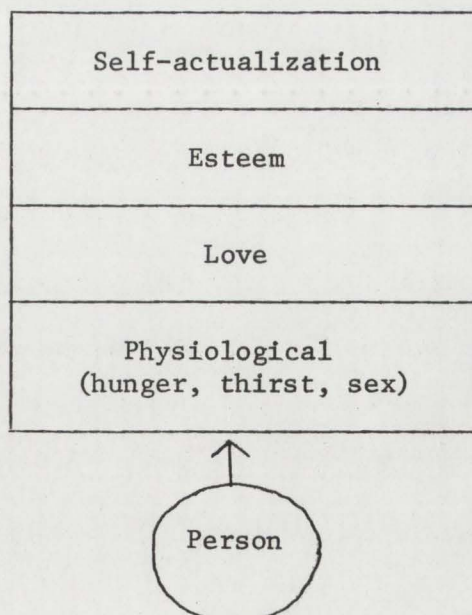
1. Family
2. Political
3. Economic
4. Religious
5. Voluntary association

C. Language -- A System of Communication

D. Cultures grow and change

1. Inventions
2. Borrowing ideas

- II. Man's interaction with nature and his efforts to control it
 - A. Soil
 - B. Water
 - C. Insects
 - D. Plants
 - E. Weather
 - F. Climate
 - III. The individual's need for relationship
 - IV. Man needs to work to survive
 - V. People strive for justice and order through law and government
 - VI. Man needs personal security, social self-control
 - VII. All mankind is interdependent
 - VIII. Man's progress depends on a scientific approach to learning
 - IX. Man requires a philosophy to live by
2. Change is the result of both the individual and group effort.
3. Maslow's Hierarchy of Needs (Coleman, 1964):



According to Maslow, needs on the "lower" levels are met first. When they are adequately satisfied, the "higher" needs will occupy the individual's attention and effort.

Concept V

Education and work are interrelated.

Developmental Objective

Exploration 4-6.

5.4: Recognize that different kinds of work require varying degrees and types of educational preparation.

Learner Expectations

The student will identify at least two necessary skills required for the performance of a job the teacher names and will describe the type and amount of educational training required for that job.

Suggested Activities

- A. Thinking in terms of five different jobs in Box Elder County, have students identify how the following math processes and skills would be used with each one:
- | | |
|-------------|--------------------|
| adding | using measurements |
| subtracting | using fractions |
| multiplying | using decimals |
| dividing | etc. |
- B. Require each student to state a mathematic problem relative to the occupation of his choice, using the peculiar math processes

and skills used in that job.

- C. The students will draw and display cartoon pictures showing different kinds of work that require:

1. math
2. reading
3. spelling
4. penmanship
5. other skills

- D. The students will inquire and decide whether any industry in Box Elder County needs an employee who speaks and/or writes a foreign language. Example: bank clerk who speaks Spanish. (Resource -- personnel departments of local industries.)

- E. The students may survey career opportunities in the community. Each child could choose three or more in which he has interest. The student can use the following sample interview form:

1. Interviewer _____
2. Date _____
3. Name the worker _____
4. Name and describe his occupation _____

5. Tell what schools he attended _____

6. Tell from which schools he received his working credentials _____

7. Tell which skills and knowledge are necessary to carry out a particular job _____
-

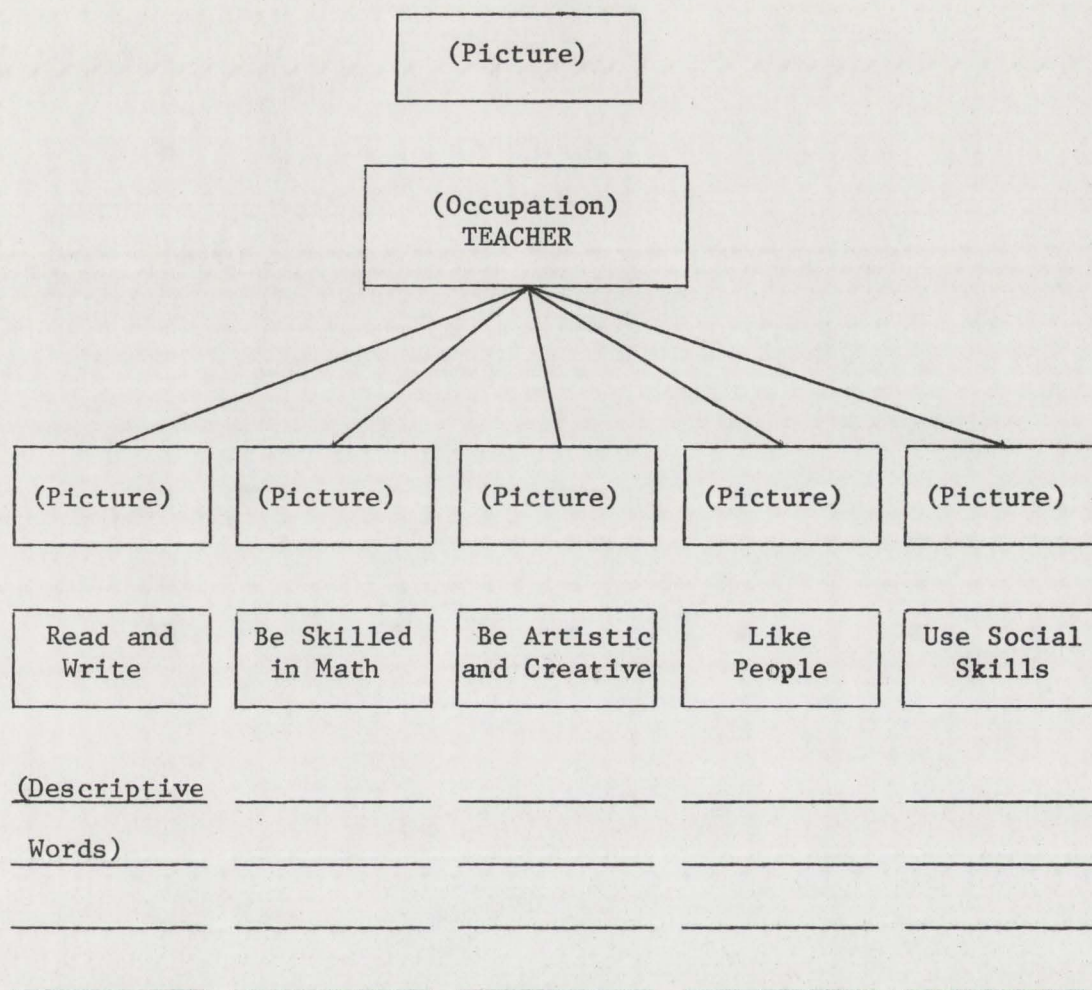
(Example for #7: a beautician needs to read, write, know all four basic mathematics processes, be artistic, be personable, have business knowledge, apply the state health and safety code, be skilled in the use of cosmetic equipment and materials.)

Some suggested occupations are listed here: lawyer, practical nurse, radio announcer, brick mason, mechanics, bank cashier, etc.

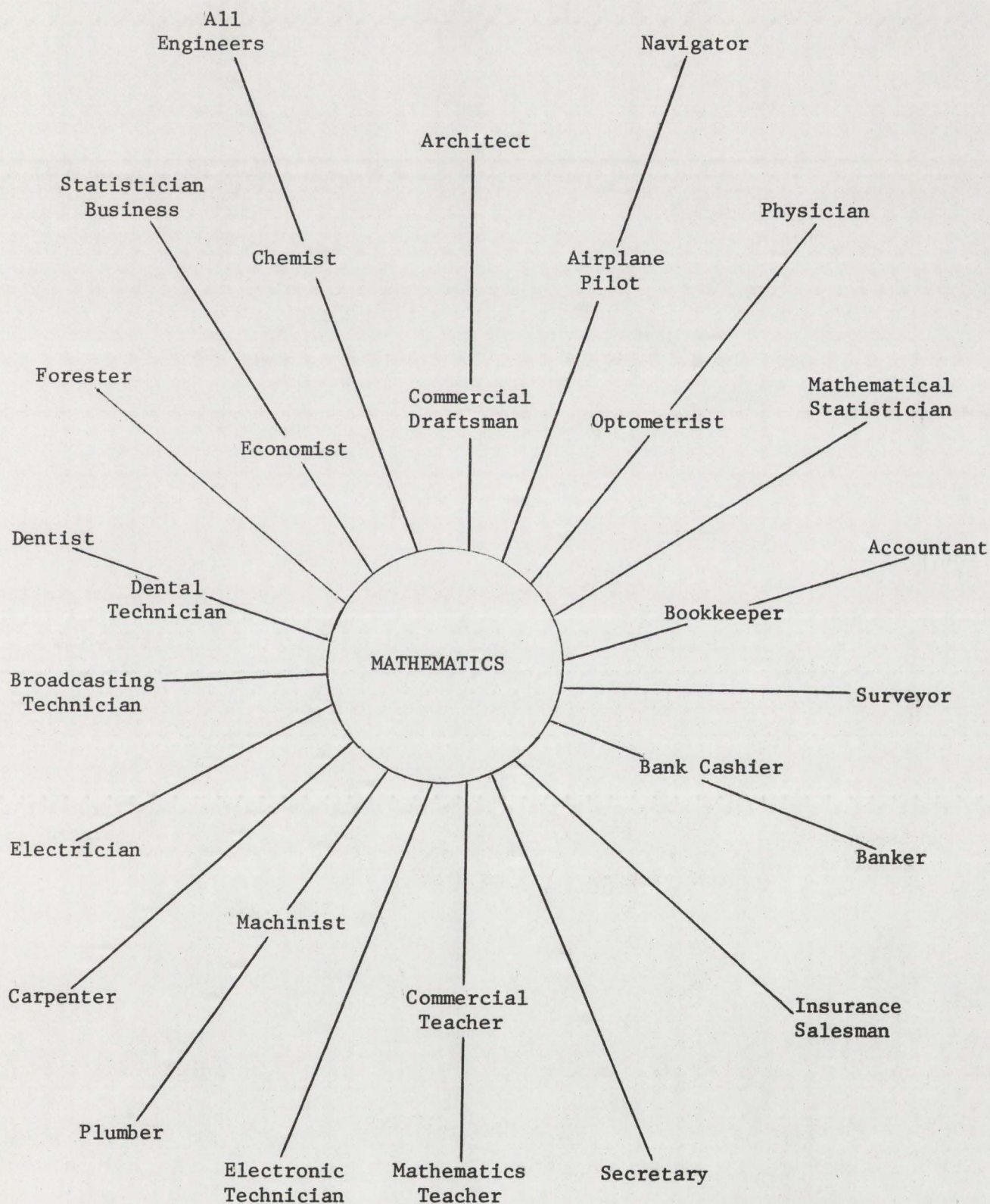
Notes to Teachers

1. After completion of each science unit studied, each student should be encouraged to talk about and tell all he can related to the job skills involved.
2. Local industry has much to offer to help children understand the academic and other skills involved in specialty production. Interesting field trips to bear this out could include such as: Thiokol, Brigham Apparel Corporation, Sugar Factory, and others.
3. The chart, Mathematics is Important in Many Occupations, is found on page 34.
4. A student committee could make a job description bulletin board.

Suggestion:



5. The students and teacher could develop lists of occupations that are related to the different school subjects. See Appendix F, "Selected Careers."

Mathematics is Important in Many Occupations

Concept VI

Occupations are of a wide variety and may be grouped in different clusters.

Related Statement: A more appropriate career choice results when one can understand the relatedness of occupational clusters.

Developmental Objective

Exploration 4-6.

6.4: Understand that clusters are related in qualities such as geographic location and people vs. ideas vs. things.

Learner Expectations

When asked by the teacher, the student will identify two occupational clusters -- one in his own community and one in another geographic location -- and tell how the workers in each cluster are related to services, ideas, things, or any combination thereof.

Suggested Activities

- A. Have the teacher review the meaning of occupational clusters by asking the children to discuss:
 - 1. What is a job?
 - 2. What is a cluster?
 - 3. What is a job cluster or occupational cluster?
- B. The children will discuss the fact that there is a wide and increasing variety of occupations, and that these occupations

may be classified in various ways to form career clusters

such as the following: people -- services

ideas -- data

things -- goods

(or any combination thereof).

The children will discuss: "What are the results of the mother's work at home?" Examples:

1. baking cake -- "goods"
2. scrubbing the floor -- "service"
3. discussing a child's problem -- "idea"

The children will discuss the results of their own individual work in terms of goods, services, and ideas. The children will discuss:

1. What kind of society would we have if all workers produced goods?
2. What kind of society would we have if all workers produced services?
3. What kind of society would we have if all workers produced ideas?

C. Write a paragraph on one of the following topics:

1. "What I Do Best" -- producer of goods, services, or ideas
2. "Occupational Characteristics of My Community"

D. Encourage the students to create scrapbooks which would include the following classes of information:

1. Identify occupational clusters.

2. Identify individual occupations.
3. Describe the function of each occupation in brief captions.

The teacher will suggest various types of clusters.

- E. Using the classified ads, the children will select ads for each of the three basic categories: goods, services, ideas.
- F. Have students compare the want ad sections of newspapers from small towns and large cities to find the occupations that are the same and those that are different.
- G. Have the class correspond with children in other areas of the United States describing their communities and work and workers found there. From notes, give a five minute report.
- H. A member of the local Chamber of Commerce could be asked into the classroom to speak.
- I. Other community workers could be asked.
- J. A field trip to the community to observe workers. Visit the City Hall to see how many workers it takes to run your community. Include city animal shelter, workshops, equipment warehouse, etc.
- K. What occupational clusters are in the school population? A survey would be a good way to answer this.
- L. The students of the class will assist in gathering a list of careers in the community. Working as a group, the class will list on the chalkboard (can be prepared for bulletin board)

careers of the community under three basic categories: goods, services, or ideas.

Looking at the above mentioned information, the student will answer the question: Does your community produce mainly goods, services, or ideas? Other types of career clusters could be used.

Notes to Teachers

1. Refer to definitions pertinent to this unit. See page 5.
2. Suggested groups to facilitate this study: services, goods, ideas or things, information, people.

In the world of work we find:

- a. PEOPLE being served, sold to, cared for, healed, taught, and entertained.
- b. MATERIAL THINGS being obtained from the earth, made into useful things, transported to where they are wanted, and kept in good repair.
- c. IDEAS AND INFORMATION being obtained, recorded, organized, and used for planning activities of one kind or another.

The words we use to analyze what the workers do to get these things done in each of the three instances are quite different. For example:

- a. WORKING WITH PEOPLE. Workers express themselves with their whole personality: with manner, expression, and mood. We describe what these workers do by using such words as teaching, serving, supervising, entertaining audiences,

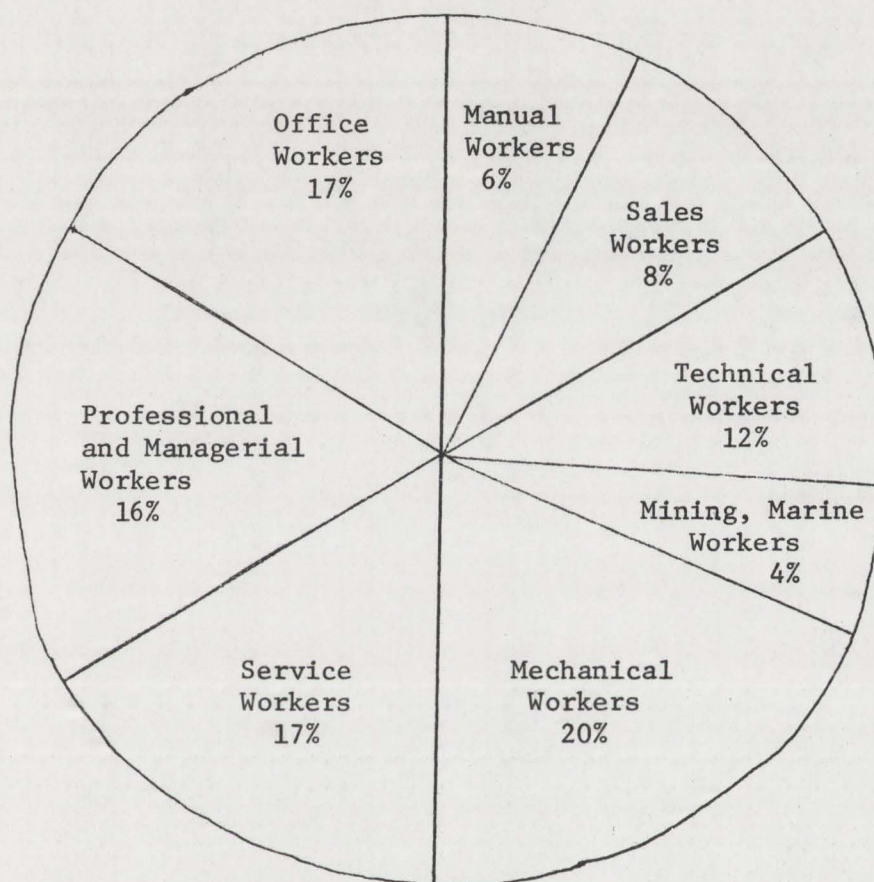
persuading customers, and exchanging information.

- b. WORKING WITH THINGS. Workers use their hands or bodies in some way often working with tools and machines manipulated by hands or feet. We describe what they do by using such words as operating, tending, handling, setting up, or manipulating a machine.
- c. WORKING WITH IDEAS OR INFORMATION. Workers are occupied in thinking and understanding; that is, in using the mind to deal with verbal or numerical material. We describe what these workers do by using such words as computing, planning, copying, compiling, or analyzing.

Each of these kinds of work activity requires a different kind of ability and training, and while a job frequently has major requirements which may emphasize one area more than others, it always has requirements in all three areas.

Occupational Families:

Distribution of Employed Persons According
to Occupational Clusters



Industrial Classification:

1. Agriculture, forestry, and fishing
2. Mining
3. Contract construction
4. Manufacturing
5. Transportation, communications, and other public utilities
6. Wholesale and retail trade

7. Finance, insurance, and real estate
8. Service industries
9. Government

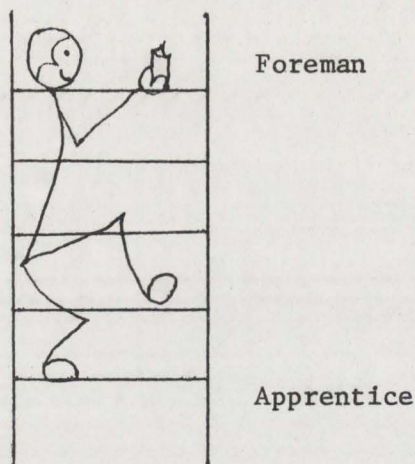
Another Grouping of Industries:

1. Agriculture
2. Communication
3. Construction
4. Finance, insurance, real estate
5. Fisheries
6. Forestry
7. Government
8. Manufacturing
9. Mining
10. Services
11. Transportation
12. Wholesale and retail trade

Agricultural vs. Nonagricultural

3. See Appendix G, "Random List of Occupations."
4. Yellow pages of the local telephone directory furnishes excellent help on occupational clusters and local industry.

5. Pictograph -- job to job:



Concept VII

Geographical location and job specialization lead to inter-dependency and affect career choice.

Developmental Objective

Exploration 4-6.

7.3: To understand the dependency of the school industry on other industries.

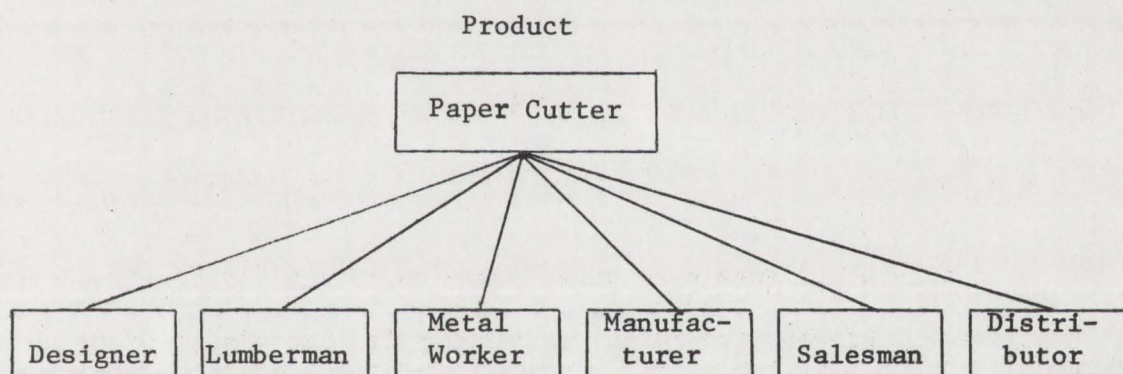
Related Statement: School support comes from the people: local industry, state and federal moneys, personnel from professional institutions, foundation grants, and others.

Learner Expectations

By giving orally no less than three supporting ideas, the student will prove to his class that public schools are dependent on a variety of groups in order to function.

Suggested Activities

- A. Using any physical object found in the school, the teacher will conduct a discussion as to its origin, manufacture, creation, source, distribution, worth, and use.
- B. 1. Using the illustration shown below as a sample, develop on the chalkboard like analyses for other products. (Can be a bulletin board exhibit.)
2. Require each student to create a similar diagram for any product of his choosing which is found in the school.



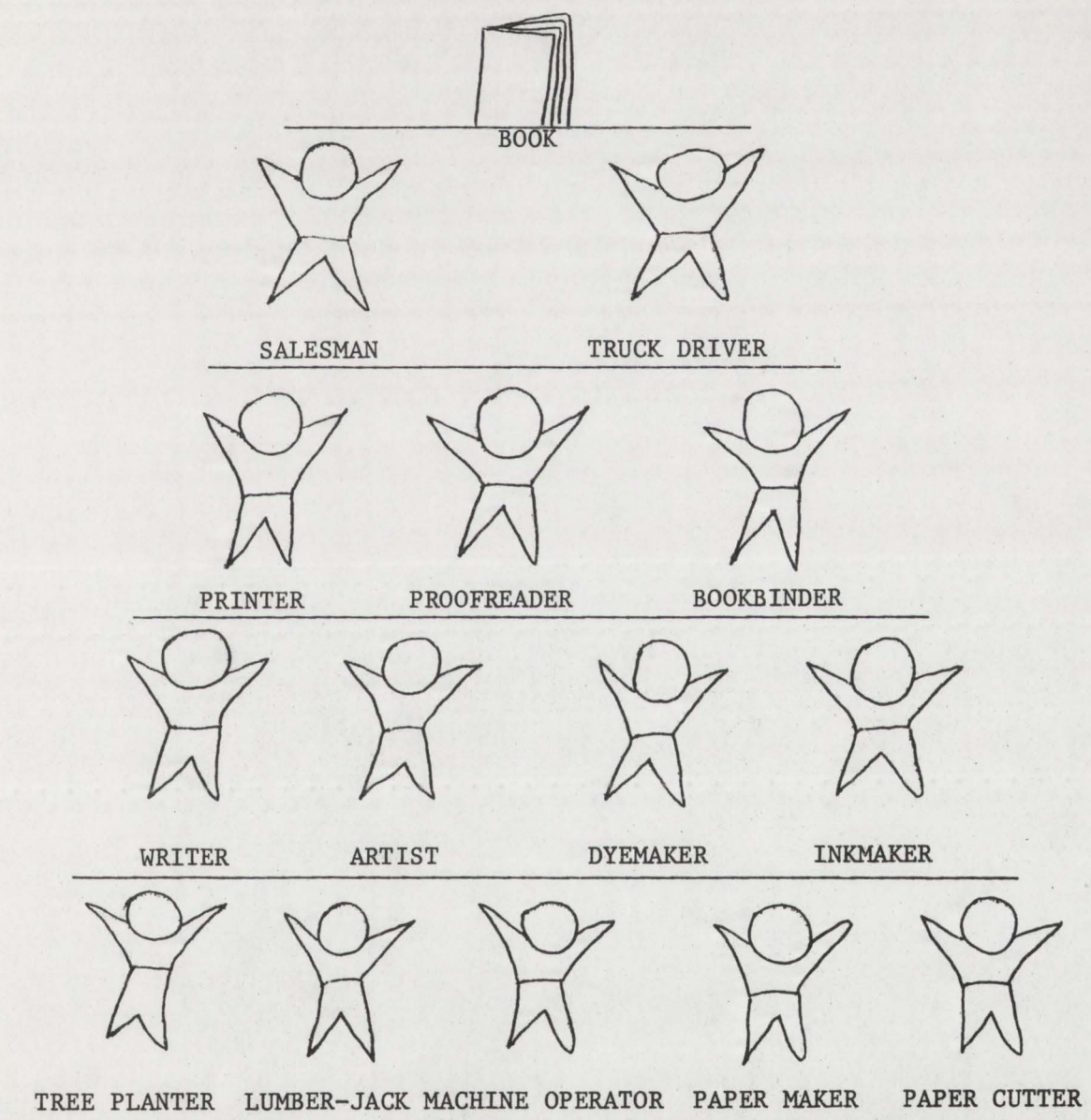
- C. With the assignment of reporting back to his class, representatives of the class attend a meeting of the school board and make a list of the kinds of problems and people that are considered relative to school business. Parent participation encouraged.
- D. Student: keep a file of news clippings pertinent to school operations.

Notes to Teachers

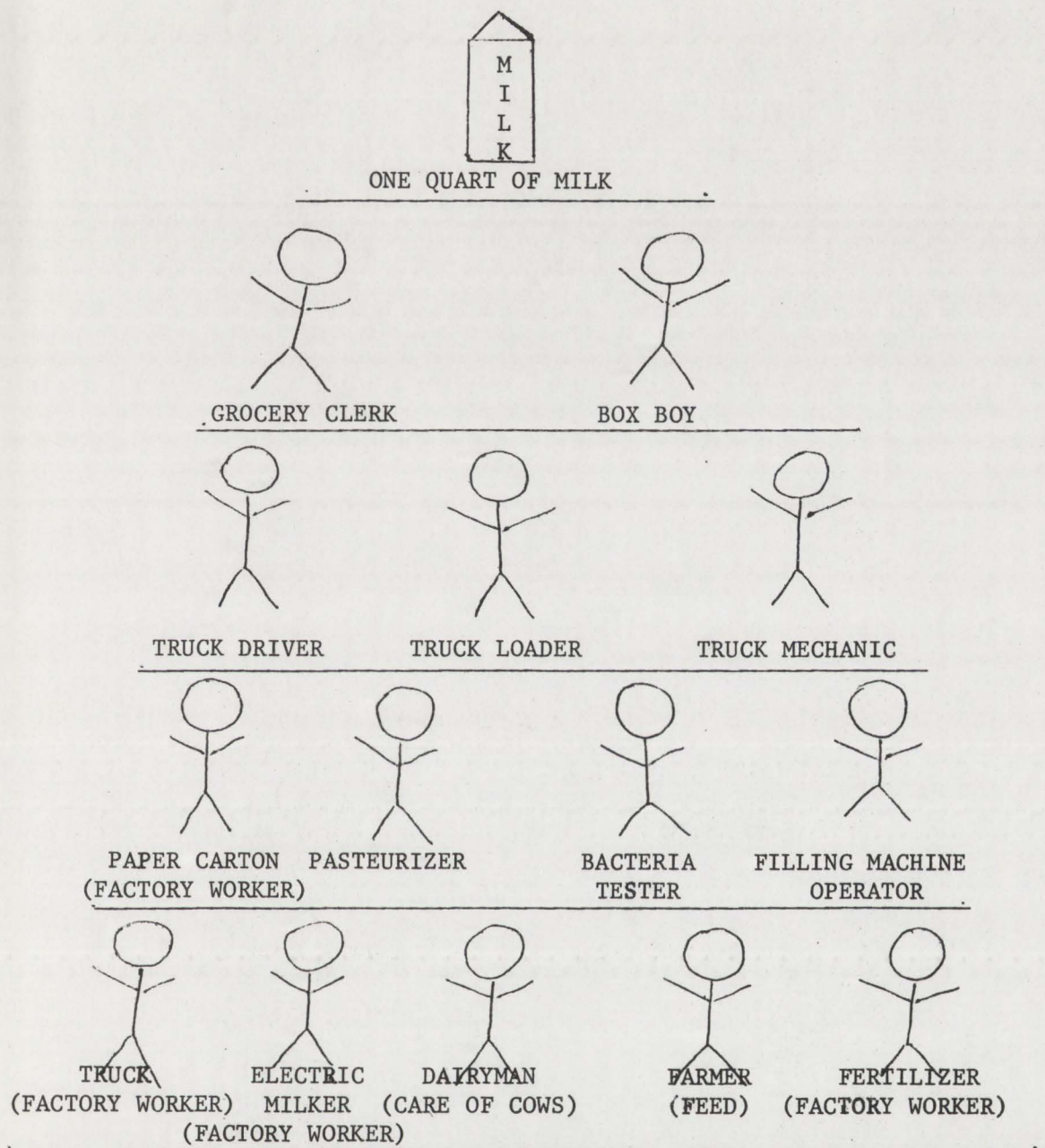
1. Examples of the "people pyramid" will help students to understand

the dependency of the school industry on other industries as well as general interdependency.

Example of "People Pyramid"



Example of "People Pyramid"



Concept VIII

Personal habits, physical and mental health affect success in careers.

Developmental Objective

Awareness 4-6.

8.2: Recognize that the maintenance of good health and personal habits affects job selection and performance.

Learner Expectations

Good health. The student will write four basic food groups by name, giving the functions of each, and explain the values related to early physical development and lifetime good health, using the State Board of Health literature.

Good personal habits. Following several class discussions, the student will list ten desirable qualities needed to find and hold a good job of his choice.

Job performance. After listening to at least four interviews with employers and workers, the student will tell four reasons why good health and personal habits are essential to meeting required job performance.

Suggested Activities

A. Good Health

1. The class will study the basic food groups and as a class will prepare posters, bulletin boards or a real meal,

depicting a well-balanced meal.

2. Cooks from the school lunch program could be invited to discuss well-balanced meals with the students.
3. The student will write out a menu for one complete meal, naming the food group to which each item on the menu belongs.
4. After completion of Unit 12, "Guarding Your Health," Grade 4, Today's Basic Science, Harper and Row, 1963, the teacher can ask a local doctor to the classroom for one or two visits. On the first visit, he could bring and share some of the tools he uses. For the second visit, he could be asked to discuss good personal habits, physical and mental health. He should be asked to discuss the importance of these factors in early life as well as in his present life and career.
5. Math could be used if the students would take a homemaker's recipe and increase the proportions to feed the class.

B. Good Personal Habits

1. Invite the school kitchen personnel to meet with the class to discuss health standards and personal habits they desire of students who help in the school kitchen.
2. Grooming, manners, health -- The Dairy Council has good helps for a unit study (1522 South 11th East, Salt Lake City, Utah 84105).
3. Guest speaker -- the health nurse can be asked to discuss personal care of skin, hair, nails, etc.
4. Conduct a personal appearance and personality class.

5. Each student could make tape recordings of his voice, replay, and listen for pleasantness of the voice.

C. Job Performance

1. Assign several students to tape record an interview with local employers to determine how each feels that good health and personal habits influence performance in his business. These interviews can be shared with the class.
2. Assign several students to interview local workers to determine how each feels that good health and personal habits have affected his job selections and his performance on the job. These interviews can be shared with the class.
3. The class will decide on some important aspects of good health and personal habits that may affect job selection and performance.

Panel discussion: The moderator and panel will be made up of students. The moderator will direct questions to members of the panel as to why and how good health and personal habits may affect job selection and performance. Several groups of children may be given the opportunity to be included in a panel.

Notes to Teachers

1. The State Board of Health literature should be secured.
2. It has been demonstrated that many handicapped persons are in good health and have good personal habits; that employers

should be encouraged to use these people in the work of their choice since they have much to contribute; they have many neglected needs.

3. Personal Characteristics:

Here are some important characteristics you will need to succeed in the world of work. First, rate yourself "Good," "Average," "Below Average" on the margin, tear off, then give the sheet to someone who knows you and ask him to rate you and return the sheet to you. Compare answers.

- a. Is Cooperative: Helps fellow workers; is willing to assume responsibility; works for the good of the class. _____
- b. Is Dependable: Gets his work in on time; does what he is told to do. _____
- c. Is Honest: Is trusted by others; takes responsibility for his own errors; avoids temptation. _____
- d. Has Self-Confidence: Believes he can and will succeed; does not know it all; never alibis. _____
- e. Is Considerate: Makes an effort to see the other fellow's point of view; is always on the alert to help others. _____
- f. Has Initiative: Makes best use of time; thinks up new ideas; makes suggestions for improvement. _____
- g. Is Sociable: Smiles a great deal; gets along with people; has a keen sense of humor. _____
- h. Is Courteous: Considerate of other people; goes the extra mile; says "please" and "thank you." _____

- i. Speech is Effective: Expresses ideas clearly and convincingly; speaks distinctly. _____
 - j. Is Ambitious: Wants the class to do well; wants to see others succeed; is a "doer," not a "dreamer." _____
 - k. Is Tactful: Says the right thing at the right time; does not argue. _____
 - l. Is Orderly: Systematizes his work; keeps things in their proper place; is clean and orderly. _____
 - m. Is Enthusiastic: Is not afraid of hard work; likes people; does his job well. _____
4. The Dairy Council information could be used very well in this unit.

5. Health Habits:

A healthy appearance is very valuable in any preparation for a job. Obviously you cannot bring this about the day before you apply for a job! Systematic health habits must be developed early and practiced persistently.

The essential elements of good health are nutrition, activity, rest, sleep and freedom from infection.

A. Eating Habits:

- Proper diet gives energy, builds, repairs, and regulates the body.
- The basic four food groups are bread and cereals, meat and meat products, fruit and vegetables, milk and milk products.

- Maintaining weight that is adequate for age and bone structure is conducive to better health.
- Tobacco and alcohol do not contribute to good health.
- B. Sleeping Habits: Adequate sleep and rest will contribute to a good supply of energy, a happy disposition, and physical fitness. Fourth grade students should have about 11 hours.
- C. Exercising Habits: Appearance and health are improved by sufficient fresh air and exercise.
- D. Eyesight: There are few jobs that do not require a person to see well. Get sight deficiencies remedied.
- E. Hearing: Ability to hear affects one's choice of jobs, and defective hearing should be corrected if at all possible.

Students should get annual physical checkups. Dental checkups should be obtained twice yearly.

6. Essential Foods (Granger, 1972):

- I. Dairy Foods...Milk, use daily
Four or more glasses
(A glass--8 ounces or 1/4 quart of milk)

This quantity of milk provides about 2/3 of the day's calcium recommended for good nutrition.

Cheese, ice cream and other milk-made foods can supply part of the milk.

Use milk as a beverage and in cooking--in hot cereals, milk soups, white sauces, puddings and custards. Pour on fruit, cereal and puddings.

The combination of milk with cereal or bread is excellent, especially in meals, where little or no meat or eggs are served. The proteins in milk make those in cereals and bread more useful in the body.

Milk is our main source of calcium:

- 1 slice American cheese (1 oz.) = 2/3 glass milk
- 1/2 cup creamed cottage cheese = 1/3 glass milk
- 1/2 cup (1/4 pint) ice cream = 1/4 glass milk

Milk also contributes fine quality protein, vitamins--especially riboflavin and vitamin A--and many other nutrients. Skim milk lacks the fat and vitamin A of whole milk (unless fortified).

II. Meat Group...

Use 2 or more servings daily.

Meat, fish, poultry, eggs, or cheese--with dry beans, peas, nuts, or peanut butter as alternates.

Use amounts of these foods to supply at least as much protein as that in 4 oz. of cooked lean meat (about 1/2 pound raw). Teenagers need larger amounts of these foods.

Good practices to follow are:

- An egg a day or at least 3 to 5 per week.
- Liver, heart, kidney, or sweetbread about once a week.
- Other kinds of meat, fish, poultry or cheese 4 to 5 or more times per week.
- With dried beans, peas, nuts or peanut butter serve milk or cheese. The animal protein makes the vegetable protein more useful.

Foods in the meat group are counted on to supply about 1/2 the protein recommended daily for good nutrition.

Two servings for an adult might be, for example...1 medium serving of meat (3 oz. cooked) plus 1 egg.

Choose combinations from the following which are about equal in amount of protein.

- 1 oz. cooked lean meat, poultry or fish
- 1 egg
- 1 slice cheese, American or Swiss (1 oz.)
- 2 tablespoons creamed cottage cheese (1 oz.)
- 2 tablespoons peanut butter (1 oz.)
- 1/2 cup cooked dried beans or peas

Eggs and meat, especially liver, are important for iron, also for B vitamins. Pork supplies large amounts of the B vitamin, thiamine, the legumes--dried beans, peas, nuts--are good sources of iron and thiamine, but their protein should be supplemented with an animal protein.

III. Vegetables and Fruits

Use four or more servings daily including a dark green leafy or deep yellow vegetable or yellow fruit at least three to four

times a week for vitamin A; a citrus fruit or tomatoes, or other good source of vitamin C every day.

Use other vegetables and fruits for variety as well as their minerals, vitamins, and roughage. Use potatoes frequently for all these food values plus food energy. Use fresh, canned or frozen vegetables and fruits.

Save food values and flavors of vegetables by cooking quickly in small amounts of water. Dried fruits are valuable for iron. A serving is 1/2 cup or more.

Foods in this group should supply over half the vitamin A and all of the vitamin C recommended daily for good nutrition. Vegetables and fruits high in vitamin A are: broccoli, chard, all greens, kale, spinach, carrots, sweet potatoes, tomatoes, cantaloupe, apricots. The following are about equal in vitamin C: 1 medium orange, 3/4 cup juice, 1/2 grapefruit, 3/4 cup juice, 2 medium tomatoes, 2 cups juice, 1/2 large cantaloupe, 1 cup strawberries, 1 1/2 cups cabbage, raw, shredded.

IV. Breads and Cereals

Use four or more servings daily. Use enriched or whole-grain products, check labels. Choose from breads, cooked and ready-to-eat cereals, cornmeal, crackers, grits, spaghetti and macaroni, noodles, rice, quick breads and other baked goods if made with whole-grain or enriched flour. A serving is one slice bread; 1/2 to 3/4 cup cereal.

Foods in this group supply valuable amounts of protein, iron, several B vitamins, and food energy.

Cereals cooked and/or served with milk and breads made with milk are improved in quality of protein as well as quantity of protein, minerals, and vitamins.

V. Additional Foods

The foods recommended from the foundation for a good diet. More calories are consumed when foods are prepared or eaten with added butter, other fats or oils, sugars, or syrups.

Meeting energy needs with more food chosen from these four food groups will help to achieve an adequate diet. Calorie restricted diets can be more pleasing and satisfying when energy comes mostly from foods in these four groups.

Some sources of vitamin D should be included. Good sources are vitamin D milk, fish, liver, oils, and direct sunshine.

7. Food Chart on Essential Foods (Granger, 1972):

Basic Food Substances	What They Contain	Why We Need Them	Sources
Protein	Nitrogen, carbon, hydrogen, oxygen, and minerals such as sulphur and iron.	To build new cells that compose all our body tissues, such as organs, blood, bone, and muscle.	Meat, fish, eggs, milk, cheese, beans, and peas.
Carbohydrates	Starches and sugars.	To provide energy.	Potatoes, bread, cereals, sugar, vegetables.
Fat		To provide extra energy and to put on weight.	Lard, butter, cream, bacon, vegetable oils, nuts, some fish such as salmon and mackerel, most meats.
Minerals	Calcium, phosphorus, and iron.	To strengthen bones, teeth, blood, and the nervous system.	Milk, cheese, leafy vegetables, beans, peas, molasses, liver, chard, lima beans, apricots, peaches, eggs.
	Iodine	To keep the thyroid gland (which helps growth) functioning.	Present in most states in water and in food. (When it is lacking iodine salt is advised.)
Vitamins	Substances present in many foods.	To provide extra nutrition, help growth, build bones and body cells, and to prevent certain diseases.	Found in most foods, particularly in dairy products, yellow and green vegetables, milk, whole grain cereals, meat, fish, fruits, peanuts.

Concept IX

An individual may be qualified to perform in many different occupations, and any one occupation may accommodate a variety of individuals.

Developmental Objective

Awareness 4-6.

9.2: Understand that abilities and limitations are related to the requirements of occupations. (Refer to 1.2.)

Learner Expectations

The student, given three academic skills and three physical skills, will distinguish how all six apply to three differing occupations.

Suggested Activities

- A. Have students list those things of a physical nature which they can do well, i.e., running, swimming, skating (ice and roller), skiing, dancing, jumping, throwing, catching, etc. He may make a second list of possible occupations for which these skills would be necessary. The teacher should help the students see that every individual has a unique set of abilities, the combination of which presents many occupational possibilities.
- B. The student will demonstrate, by matching tool with worker, that he recognizes the tool that the worker must have the ability to use in his occupation.

Have the class play "Concentration" using occupation and tool cards turned upside down on the floor or table. To get one point, the students must:

1. match the appropriate tool and occupation card.
2. state the name of the occupation.
3. tell how the worker uses that particular tool in his work.

Resource Materials:

Occupation and tool cards from Peabody Language Development Kit -- Kit Level #2, or the students may make their own picture cards and use them.

- C. Present a "Guess Bag" to the class filled with about twenty different gloves used by a variety of workers: rubber, garden, mechanics, dress kid, driving, etc. Without telling students what is in the bag, have them guess its contents. Eventually, have one student at a time draw out a glove and tell all he can about how the worker who needs it uses it. Other Guess Bags could contain such things as keys, tools, spoons, hats, etc.
- D. The student will develop a three-column personal chart listing his: (a) Interests, (b) Abilities, and (c) Possible Occupations. The student will have his personal chart checked by another child for reasonableness. The child will, then, orally present his chart and explain how the occupational choice validly relates to his interests and abilities.
- E. The child will write a paragraph on "What I Like To Do." The child will read the paragraph to the class. The class will make

a composite list of skills related to the activity described in the paragraph. The class will suggest other activities in which these same skills are used.

- F. The child will list the variety of occupations in which a carpenter (or other occupation) could function because of his skills.

Example: A chemist could move to various geographic areas to work in a water department, paint industry, foundry, paper mill, etc.

Notes to Teachers

1. Before beginning this unit it is suggested that time be taken to make a list of academic and physical skills related to common occupations.
2. The study of occupations easily becomes an integral part of social studies units.
3. The students can develop a mathematics tree. Branches will be labeled with names of jobs which make use of mathematics. This can be developed, using a real tree branch and label with printed signs and/or pictures. Other types of occupational trees can be developed.
4. See Random List of Occupations -- Appendix G.

Concept X

Career choice affects leisure time activities and leisure time affects career choice.

Developmental Objective

Awareness 4-6.

10.1: Be aware of the differences between work and leisure.

Learner Expectations

To the class, the student will explain the difference between the terms work and leisure and within five minutes, name in writing five activities in each category.

Suggested Activities

- A. A bulletin board can be used to introduce this activity. (See Notes to Teachers.) The class will discuss how much time per day they sleep and how much time they work or go to school. The teacher will ask the students what happens during the remainder of the time. Through class discussion, the children can be led to see that the activities done in the remaining one-third of the day are labeled "leisure time activities."
- B. Considering work, leisure time, and sleep, ask each child to divide two of his own large circles into appropriate proportions showing on one how he spends his time today and in the second how he would plan to spend his time as a wage earner.

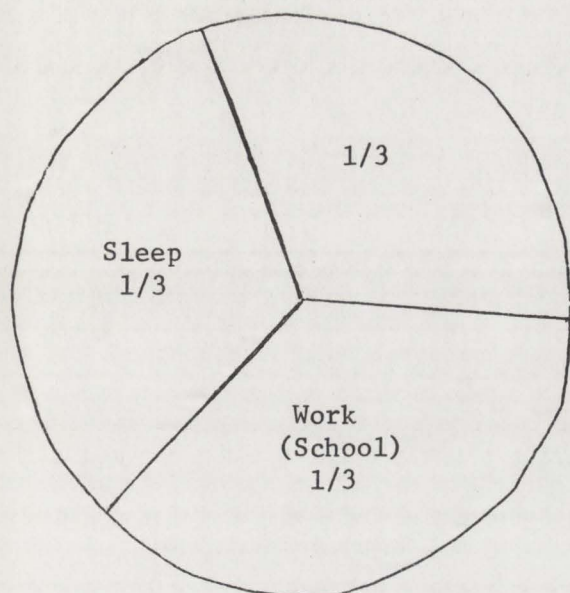
- C. As a cooperative class project, assign each student to bring or draw pictures appropriate to each area to display on the bulletin board pie graph.
- D. Have the class create a composite list of activities which they do when they are not in school. This list may be kept for future reference.
- E. For further exploration have the class circle those activities that might come under the heading "Hobbies."
- F. Hobby Display: Set up tables in the auditorium, hall or gym and have the students contribute to a hobby display.

Notes to Teachers

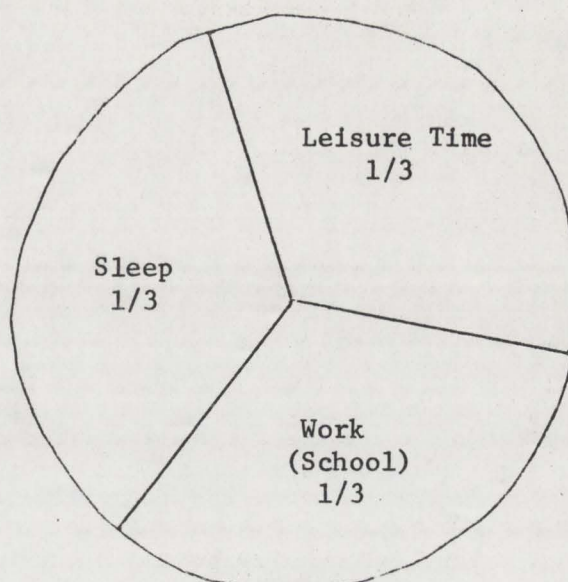
1. Work: defined as an activity calling for the expenditure of an effort toward some definite achievement or outcome.
Leisure: defined as freedom from required effort usually interpreted as time not spent on the activities of working and living.
Reward is in doing rather than on the end product.
Hobby: defined as a pursuit outside one's regular occupation, engaged in for relaxation.
2. Using the pie graph illustrated below, introduce and stimulate interest in the important functions of work and leisure, stressing the vital effects each has on the lives of people -- now and in the future.

Sample Bulletin Board: "What Do You Do With Your Day?"

Before Discussion:



After Discussion:



3. The teacher will want to help the class see the relationship between hobbies and occupations. Hobbies often lead to a career choice. A discussion on this topic should lead to such facets as follows:
 - a. leisure activities of interest
 - b. planning involved for work
 - c. cost of engaging in a hobby
 - d. how our hobbies affect other people
 - e. the time required for hobbies
 - f. appropriate choices
4. Invite community people, faculty, staff, etc. to come to class and demonstrate their hobbies. May wish to work this into a Hobby Day.

5. Students and teacher could make slide programs and tape interviews of people with interesting hobbies and show to classes at the school.
6. Start an apprentice-hobby program in which students with hobbies share them with students without hobbies to help others build interest in hobbies. This could involve after-school time and then reporting back to class.
7. The students can discuss ways leisure time activities can benefit a person's mental health.
8. Have the student describe two leisure time activities which would improve the physical health of a person who sits at a desk while at work.
9. Ask each student to tell his favorite leisure activities and explain how he benefits from them.

Concept XI

An individual's attitudes, values, and life style affect career choice and success.

Developmental Objective

Awareness 4-6.

- 11.1: Understand that some careers appear attractive because of observed life styles of the workers; i.e., preferred life style may influence occupational choice.

Learner Expectations

After completing the personal inventory "What I Know About Me," the student will name two occupations that appear attractive for him, giving at least one reason for each choice.

Suggested Activities

- A. In an overview of selected occupational books from the library and/or available films, the students will look at the pictures to observe and discuss the worker and his life style.
- B. The students may role play the worker in a typical working situation and/or in an appealing aspect of the life style of the worker he considers.
- C. Furnishing each child with a copy of the personal inventory "What I Know About Me," assign each student to personally respond to each question.

Notes to Teachers

- 1. Consider Appendix E on values as helpful to develop this concept.
- 2. Conduct an enjoyable discussion and help draw out the children's expressions of interests, hobbies, talents, likes and dislikes, and give the reasons why. Include talking about:
 - a. the effect of geographic locations of work (for climate, hobbies, etc.).
 - b. amount of leisure time the work allows.

c. the monetary advantage of various types of occupations.

3. Personal Inventory: "What I Know About Me"

- a. What I like to do.
- b. The hobbies I have or would like to have.
- c. The clubs I belong to.
- d. Some clubs or things that I have done that I did not enjoy.
- e. What I most often do in my spare time.
- f. Contests or competitions I have entered.
- g. What subjects I like best in school.
- h. The subjects I do not enjoy in school.
- i. What sports or games I like best.
- j. What kind of person I like best to be with.
- k. What kind of person I like least to work with.
- l. Do I like to read in my spare time and why.
- m. What kind of jobs do I like to do best now.
- n. What kind of work would I like to do in the future.
- o. Do I spend most of my free time indoors or outdoors.
- p. What kind of an animal would I like for a pet.

Concept XII

Age, sex, ethnic group, or religion no longer limit career possibilities to the extent that they have in the past.

Developmental Objective

Awareness 4-6.

12.1: Recognize and identify a number of occupations that have

become available to a broader spectrum of people with respect to age, sex, ethnic group, and religion.

Learner Expectations

A committee of two students will prepare eight questions and corresponding answers relative to the greater opportunities in the world of work with respect to age, sex, ethnic group, and religion, and as partners pose four questions to each other to be answered before the class, using the information each has gained in his study.

Suggested Activities

- A. Conduct several class and panel discussions on this concept.
- B. Boys: List and give reasons why you feel that women should have the same opportunities to hold the same jobs as men do and receive the same pay.
- C. Girls: List the things which you feel discriminate against women in the world of work.
- D. Invite some knowledgeable persons from minority groups to visit the class and enlighten students on each particular culture and their problems.
- E. Students will be asked to write on such topics as:
 - 1. My mother is a doctor.
 - 2. My mother is an automobile mechanic.
 - 3. My father is a nurse.

4. My father is a telephone operator.
 5. My brother is an apprentice student.
 6. My sister is an apprentice student.
 7. My brother is a hair stylist.
 8. My father is a ballet dancer.
 9. My mother is a judge of the court.
 10. My sister is a telephone linewoman.
 11. My mother is a bus driver.
- F. Students can gather pictures of minority workers for bulletin board display, "Work Has Dignity as it Contributes to Society."
- G. Check and see if there are any high school student workers in your school or nearby. Ask them to the class to tell about their work.
- H. Retired persons could be asked to visit the class to offer their point of view.

Notes to Teachers

1. Problems related to retirement income groups. Invite a person from each of the following groups to speak in their field.
 - a. (Federal) Social Security
 1. Age of retirement
 2. Medi Care
 3. Problems of insufficient income
 4. Restriction on earnings
 5. Have retirement tax laws

- b. State Employees
 - 1. Age of retirement
 - 2. Single person status
 - 3. Forced retirement
 - c. Armed Services
 - 1. Early age of retirement
 - 2. Earning opportunities in addition to retirement pay
(no Federal restrictions)
 - d. Independents
 - 1. Inequalities of retirement income
 - 2. Insecurity of later years
2. The students could be asked to check newspapers for occupations that have become available to a broader spectrum of people with respect to age, sex, ethnic groups, and religion. The newspaper articles can be shared, telling about the worker and his job.
 3. Frequently people of a particular religious faith are sought out for certain types of work. This is usually because of praiseworthy characteristics -- trustworthiness, endurance, broad-mindedness, consistency, performance, quality workmanship, cleanliness.
 4. Encourage students to read stories with an occupational background dealing with the substance of this unit.
 5. The students could be asked to share their experiences and knowledge concerning workers of minority groups.

Concept XIII

Women as well as men should prepare for a career.

Developmental Objective

Awareness 4-6.

13.1: Understand that women work for many reasons.

Learner Expectations

Following discussions with two women who work outside the home, using the five interview questions agreed upon, the student will list three reasons why women work outside the home.

Suggested Activities

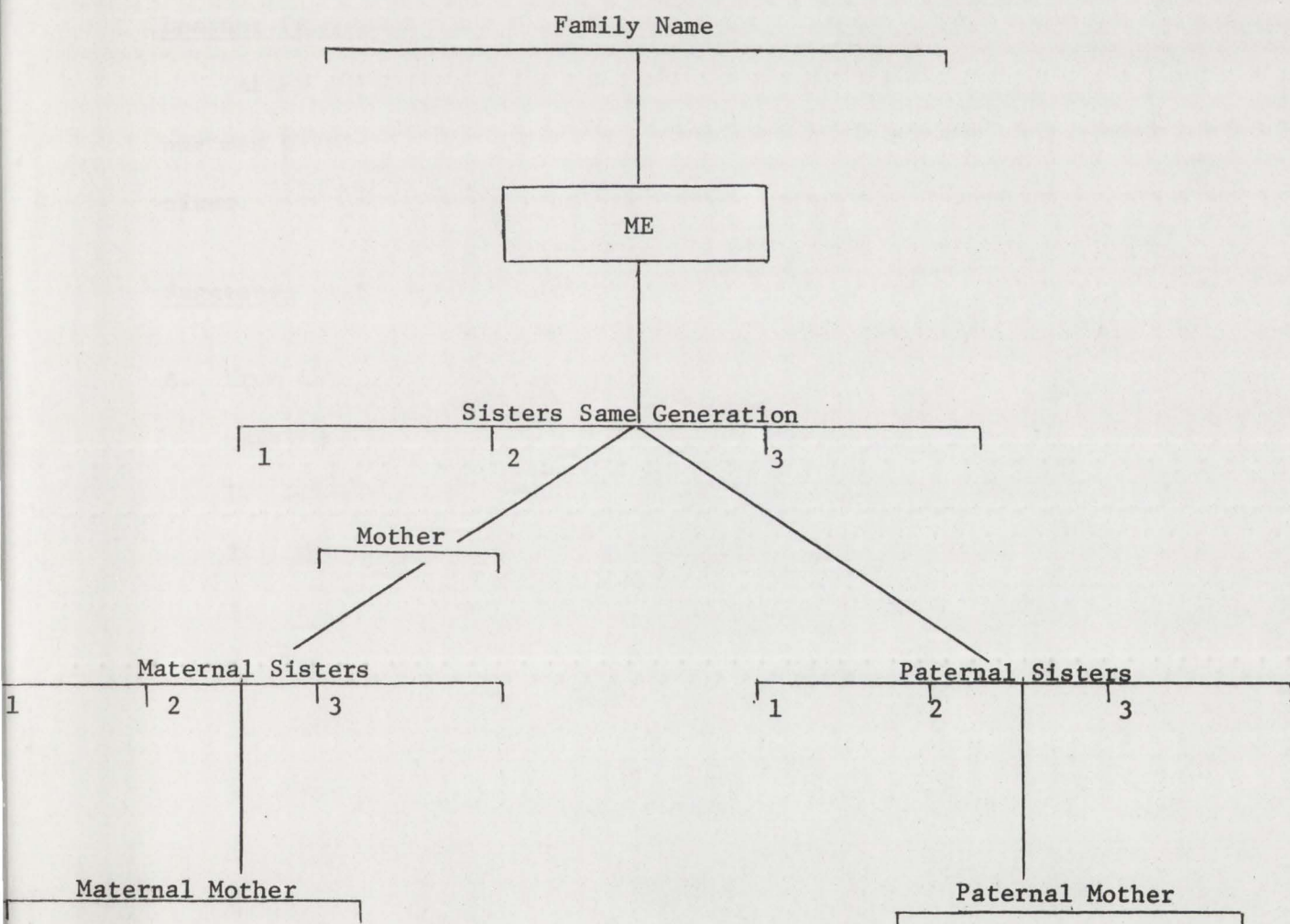
- A. Invite women workers to the classroom to discuss:
 1. their job description and responsibilities.
 2. how outside home employment affects home living.
 3. what problems are encountered
 - a. with an employer.
 - b. with the family members.
 - c. in meeting social obligations.
 - d. in filling the role of homemaker in the home.
 4. why they need to work away from their homes.
- B. Take a field trip to observe and interview women at work.
- C. On his own the student will interview at least one other working woman (not his own mother).

Notes to Teachers

1. The U. S. Department of Labor reports that 9 out of 10 women will work sometime during their lifetime.
2. Help children to become aware that there should be honor and dignity associated with any work in the home.
3. Emphasize to students that most women will perform a variety of jobs besides that of homemaker.
4. Reasons why women work:
 - a. Single women work to support themselves. Women who are head of a family (widows, divorcees, etc.) need to support selves and others or supplement other income.
 - b. Married women work:
 1. to supplement family income.
 2. to be able to educate children.
 3. to meet unexpected expenses.
 4. to give service.
 5. to get a job done.
 6. to avoid home work.
 7. for personal enjoyment.
 8. to buy the luxuries of home of leisure.
 9. to further their own goals.
5. Sample interview questions:
 - a. What is your name?
 - b. What is your job?

- c. What are some of your responsibilities on the job?
 - d. Why did you decide to work?
 - e. If given your choice, would you still want to work at this job?
6. Using a family tree, list the names of women who worked. What kinds of work did they do? Sample:

Women Workers in My Family



Concept XIV

Jobs may be obtained in a variety of ways.

Developmental Objective

Awareness 4-6.

14.1: Be aware that jobs can be obtained in a variety of ways.

Learner Expectations

After interviewing five people, the student will tell how each one was hired for his job and summarize the different ways for his class.

Suggested Activities

A. From the following list match imaginary ways you would go about getting the job.

1. Newspaper reporter _____
2. Babysitter _____
3. Jockey _____
4. Policeman _____
5. Professor _____
6. Sales Clerk _____
7. Gardener _____
8. Meter Maid _____
9. Mayor of your city _____
10. Circus hand _____

- B. Each fourth grade student who has had a job outside the home should tell the class how he got his job.
- C. Role-play an applicant asking for a job from an employer.
- D. Write a humorous short story illustrating the predicament an applicant got into when he was hired for a job.
- E. Write a skit showing proper and improper ways of applying for a job.
- F. Through a class discussion talk about when it is inappropriate for some people to apply for certain kinds of jobs.
- G. Discuss why employers are urged to hire handicapped persons who qualify.
- H. Discuss the kinds of work which children can do.
- I. Each student should list several reasons why he needs a desired job.
- J. Talk about what an applicant's responsibility is toward a new job.
- K. Give students a list of occupations (Appendix G). Have them write down 10 occupations which interest them.

Notes to Teachers

1. Each person has his peculiar experience in obtaining a job.
The following list may be lengthened.
 - a. Long roads of preparation

- b. Education and study
- c. Answer applications
- d. Answer an ad
- e. Talking to people
- f. Having a special talent
- g. Money or lack of money
- h. Equipment you have
- i. Having a car
- j. Drafted
- k. Chance meeting
- l. Talent scout
- m. Death leaving an opening
- n. Promotion
- o. Drive, desire -- perseverance
- p. Good fortune (age, religion, or in the right place at right time)

2. Helpful hints for students looking for work:

- a. How to apply for jobs
- b. Where to apply for jobs
- c. Personal qualifications desirable for successful employment
- d. What jobs are available and location
 - 1. summer
 - 2. after school
 - 3. permanent
- e. A clear understanding of the rewards and benefits including:
 - 1. wages in keeping with the work
 - 2. services rendered

3. skills of workers
- f. An understanding of the relationships between part time jobs and careers
- g. An acceptance of the fact that work has dignity as it contributes to society.
3. Each student could fill out the student application form then exchange with a friend. After studying the application, the friend would write on the paper the kind of work he would hire the applicant to do. Sample:

Student Application

Please Print

				Date	_____
Name	_____				
	Last	First	Middle		
Address	_____				
	Number and Street	City	State	Zip Code	
Telephone Number	_____	Birthdate	_____	Age	_____
Present Grade	_____		School	_____	
Kind of Work Wanted	_____				
My Most Interesting Subjects	_____				

Subjects Hard for Me	_____				

Other Things I Like to do _____

Student Signature

Concept XV

Most jobs are competitive.

Developmental Objective

Awareness 4-6.

15.1: Be aware that most jobs are competitive.

Learner Expectations

Before the class, two students will, each in turn, dramatize the job of a soap salesman by presenting in his own way a three-point sales talk for an imaginary product to a "housewife" at her front door and who eventually buys from the better salesman.

Suggested Activities

- A. Discuss what competition means.
- B. Talk about some of the things businesses do to compete for top quality help. (Move people's goods, fly people in for interviews, offer higher salaries, etc.)
- C. What do business people have to do if they lose to their competition? (Advertize, evaluate their management practices, lower

overhead and product costs, hire better employees, etc.)

- D. Divide the class into thirds. Two groups each plan a colorful display and present it to the third group who will be the judges as to the manner of the competition.
- E. Invite several employers of unlike businesses to come to the classroom to discuss with the students what they do to meet their competition.

Notes to Teachers

1. The element of competition enters into holding as well as securing a job. Points for discussion:
 - a. More jobs are lost because of inability to work with others than because of lack of skills.
 - b. It is the responsibility of each worker to give a full day's work for a full day's pay.
 - c. Superior ability to work with others is a basis for promotion.
 - d. Respect and loyalty between employee and employer is essential to good working relationships.

2. Some necessary traits for securing and holding a job:

Honesty	Courtesy	Ability
Efficiency	Cooperation	Dependability
Punctuality	Proper grooming	Good health
Initiative		

3. The teacher could possibly arrange with several employers to have students visit them to ask questions concerning competition of workers applying for a job. Examples:
- a. Did you have more than one person apply for your last job opening?
 - b. If so, why did you choose to hire the applicant you did?
 - c. What is your percentage of success in your choices?
 - d. What on-the-job training do you find is necessary in order to meet your competition?
 - e. Do you have a systematic employee advancement plan?
 - f. If so, what merit scale do you use for promotions?
 - g. Do you have an employee participation program?
 - h. Are you a profit-sharing company?

Concept XVI

Technological and sociological changes affecting supply and demand of jobs and workers may necessitate retraining.

Developmental Objective

Awareness 4-6.

- 16.1: Be aware that technological and sociological changes eliminate some jobs and create new jobs which may necessitate retraining.

Learner Expectations

Using two recommended references, the student, in an oral report, will give to the class at least four reasons why the nature of various jobs change.

Suggested Activities

- A. Invite the county agricultural agent to explain how farming is changing with scientific advances.
- B. Have students investigate vocations in which they are interested as to the evolution of that occupation. The teacher will suggest that they read reference materials in the library.
- C. Have the class gather information for bulletin board display or to place on charts: (a) jobs that have become out-dated, (b) inventions that have changed jobs, (c) recently developed jobs, such as those connected with space and new technology.
- D. Have the students make a mural showing change in the World of Work -- housing, preparation of food, production of clothes, transportation, or other. Stress the fact that change necessitates acquiring new understandings, skill and knowledge (retraining).
- E. Have a panel discuss the changes that are necessary in the lives of students who move from one area of the country to another.
- F. Have the students prepare a display of out-dated tools.

Notes to Teachers

- 1. By carefully questioning students, establish the fact that due to scientific advances, more people have become involved in services than in the production of goods. About 1900, agriculture workers tallied 50% of the labor force; today it is only 8% or less.

2. Alert the county agricultural agent to make a comparison of farming fifty years ago and today. Include:
 - a. worker numbers
 - b. produce quantity
 - c. kind of products
 - d. technology usedrelating particularly to the locale.
3. Since sugar beets are a major crop in Box Elder County, this could lead very aptly to a study of the ramifications of this part of the agricultural scene.
4. Activity F could be introduced by the teacher with a few odd out-dated tools or instruments -- flat irons, lamps, candle snuffers, bed warmer pans, fans, etc.

Concept XVII

An individual should acquire and use decision-making skills.

Developmental Objective

Awareness 4-6.

17.4: To develop an awareness of the cause and effect of personal decisions in goal setting and attainment.

Learner Expectations

Drawing from his own experiences, the student will tell two examples of the effects of wise decisions he has made concerning problems confronting him and two examples of unwise decisions,

also telling how the results in each case related to his set goals and the final attainment he achieved.

Suggested Activities

- A. Have each child relate to the class an embarrassing incident he experienced because of an unwise decision he had made.
- B. Discuss the results of procrastination and indecision on the lives of people. Give examples.
- C. Ask each child to keep a log for one day of all the major decisions he makes.
- D. Given a debatable question, poll each class member on his decision of a solution. Using a committee of two girls and two boys to evaluate the results, tell whether boys or girls came up with the better solutions.
- E. Discuss why it is very difficult for some people to decide what they should do.
- F. Ask several children to describe how they feel when given the responsibility by adults for making important decisions which affect themselves and others.

Notes to Teachers

- 1. The teacher will discuss with the class the elements and principles involved in using decision-making skills to arrive at a desired goal.

- a. Recognize need for a specific goal.
 - b. Check array of sources in determining alternatives.
 - c. Assess desirability and probability of the alternatives as they relate to self and environment.
 - d. Choose in terms of present and future as perceived.
 - e. Develop workable plans.
 - f. Make a commitment.
 - g. Work for desired goal.
2. Responsibility and practice in making decisions develops decision-making power.
 3. Special consideration should be given when personal decisions affect others.
 4. Many actions are by default rather than by a conscious decision to act in that manner.
 5. Often people do not hold their jobs because they are unable to make clean-cut decisions with dispatch.
 6. The student needs to develop a realistic understanding of self (concerning self, personal feelings, interests, aptitudes, achievement level) and a total situation (environment) for wise decision-making.
 7. Self-discovery, planning, and decision-making are continuous processes and are dependent on each other.
 8. Each person should be encouraged to make his own decisions.

9. To make wise decisions, each person needs to recognize and accept his capabilities and limitations.
10. Success is the achievement of a goal. Items to consider:
 - a. Ability to keep trying, even after defeat.
 - b. Selecting goals of high interest.
 - c. Goals must be consistent with the individual's abilities and limitations.
 - d. Some things can never be achieved.
 - e. Occassional failure is to be expected in all undertakings.

SUMMARY AND RECOMMENDATIONS

Summary

Recognizing the increased need of career education at all levels, the Utah State Department of Education sponsored a workshop, Summer 1972, to develop a state guide for career education. This group formulated basic guide material for developing career education programs in the schools of Utah. The guide states seventeen major concepts with related developmental objectives. The concepts and developmental objectives were arranged in three career education learning levels, according to grade level and appropriate interaction: awareness (an initial recognition of concepts relative to the career education process), exploration (an expansion and thorough examination of concepts relative to the career education process of which one has become aware), and adaptation (the integration and/or implementation by the emerging self of previously learned career education concepts in the development of a career identity).

The purpose of this paper was to design a career development program to help fourth grade children better understand themselves and the world of work.

In accomplishing this, the writer selected only one developmental objective from each major concept for use with fourth grade students. After the selection was made, learner expectations, suggested activities, and notes to teachers were written for each objective. The completed material within this study provides for

seventeen units of career development at the awareness or exploration level to be used by fourth grade teachers and students. Mention should be made here that the state guide contains other developmental objectives appropriate for fourth grade study that were not included in the materials prepared for this paper.

Recommendations

This career development program has been broadly conceived and organized to permit wide application in a variety of ways. Any teacher who uses this material should feel free to modify the learner expectations and activities to his unique situation. The intent of this paper is to suggest a variety of career activities that would incorporate career development experiences within the traditional curriculum.

To assist the teacher in implementing this program, the following recommendations are offered:

1. Radiate a positive attitude toward all areas of work and activities that will help the child become more informed. During the formative period practically every decision and every experience in which the individual engages has occupational significance. Social aptitudes, health, personality structure, attitudes and skills are the raw materials from which occupational choices eventually emerge.
2. Keep the program flexible. Children need freedom to experience degrees of success and teachers should not over-control the career development activities. The program should be

graded and adapted to the developmental level of the youngster the program or projects are designed to serve.

3. Encourage each child to evaluate his work through "hands-on" types of activities as much as possible; however, the child's understanding of occupations is also determined by how he feels about what people do. The "feel" he gets from a poem about a blacksmith may cause him to identify positively with the blacksmith even though he may not know what he does or the kind of person he really is. He just feels this way about him.
4. Invite and encourage a wide variety of parents and community workers to participate in the career development program. They provide a good source for career models and as such should be involved. Since decision making at the elementary school level is so thoroughly dependent upon parents, it is extremely important to keep them informed of programs and projects being planned. They are probably the most definite influence on the occupational choices of youngsters at this period.
5. Set reasonable goals for integrating career development activities within the present curriculum. Insofar as possible, the occupational materials and concepts initiated at the elementary school level should be integrated into the regular curricula of the schools. Special programs should supplement rather than replace the present educational program.

6. As much as possible, non-reading methods and techniques of studying and presenting information about occupations should be used at this level. Films, field trips, identification with individuals in various occupations are examples.
7. Recognize that interest will be so unstable at this time that they can only be conceived as temporary and changing. Much the same thing can be said of values. Both interest and values become more of an indication of what will motivate children after the fifth grade. Girls are probably more interested with values and boys are probably more concerned with interests at nearly all stages after the fifth and sixth grades.

The teacher is the key person in the career development program. It is suggested that competencies needed for career education can be among those taught and required for certification. Some of those competencies are:

1. Knowledge of the career development tasks and how to help students master them.
2. Ability to relate academic subjects to the careers that students are exploring.
3. Knowledge and experience necessary to develop individualized instructional packages related to a student's career objectives.
4. Ability to use feedback to aid students to discover and explore.
5. Ability to direct students in applying knowledge gained

from subject matter to the solving of job-related problems.

6. Knowledge of methods to assist students in gaining decision-making skills.

It is recommended that the above skills become part of a teacher preparation program.

If each child is to make a real contribution in our society through a successful and productive career, it will be largely the result of interested teachers who relate subject matter to the real world of work.

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- Behavioral Objectives and Instruction. 1970. Kibler, Robert J., Larry L. Barker and David T. Miles. Ayllon and Bacon, Inc., Boston.
- Big City Workers (filmstrip series) Eye Gate. Set of 9.
- Bill Garman, Twelve-Year-Old Businessman (film) Firth Films. Story of an American boy with his own business.
- Capes. 1972. Washington State Department of Education, part 3. Olympia, Washington.
- Career Decisions. Byrn, Delmont K. Good for upper elementary grades.
- Career Descriptions (filmstrip kit) Avid Corporation. Six filmstrips provide career information to children at the intermediate level, using people, date, things approach.
- Career Development: Choice and Adjustment. 1963. Tiedeman, D. V. and O'Hara, R. P. College Entrance Examination Board.
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*Some of the materials cited have been used, in part, in constructing learning activities for this paper. Some are available upon request.

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Career Development in the Elementary School. A Guidebook for Teachers and Guidance Counselors. 1971. Ryan, Charles. Career Development Project, College of Education, University of Maine, Orono, Maine.

Career Development K-12. Unpublished paper, available on request. Dr. Charles W. Ryan. College of Education, University of Maine, Orono, Maine.

Career Development, K-12, North Dakota's Exemplary World of Work Project. 1971. State Board of Vocational Education, 700 East Boulevard Avenue, Bismark, North Dakota 58501.

Career Development: Self-Concept Theory. 1963. Super, D. E. College Entrance Examination Board, Princeton, NJ 08540.

Career Development (Series) Palmer Publications, 1967. Includes a personal checklist.

Career Opportunities I (Set of 5 filmstrips) Popular Science New Career Opportunities, Your Life of Work, Interests Pay Off, Career Planning in a Changing World, How to Study Occupations.

Careers in Aerospace (pamphlet) Science Research Associates, 250 East Erie Street, Chicago, Illinois 60611.

Careers in Music, Music Teachers National Association, New York (pamphlet).

Careers in Recreation (1959) (film) Film Associates of California.

Catalog of Materials for Elementary School Career Guidance. Society for Visual Education, 1345 Diversey Parkway, Chicago, Illinois.

Catalog of Materials for Elementary School Career Guidance. Western Publishing Company, Inc. 850 Third Avenue, New York, NY.

Come to Work With Us (6 titles). Wilkinson. Sextant Systems, 3048 N. 34th St., Milwaukee, Wisc. 53210.

Community Workers and Helpers (filmstrip), Society for Visual Arts.

Developing Responsibility, Coronet Films, Black and White or Color. 11 minutes, Study of boy and dog points out that responsibility entails hard work, difficult decisions and missing out on fun but it also gives great satisfaction.

Doctor, Lawyer, Indian Chief. A Career Guidance Manual for Elementary Teachers Project. 1971. Developmental Career Guidance, Wayne State University, 325 Education, Detroit, Michigan.

Fathers Work Mothers Work Too (film) Imperial Films.

Filmstrips and Cassetts (or Records): Who Do you Think You Are?
Guess Who's in a Group
What Happens Between People
You Got Mad: Are You Glad?
What Do you Expect of Others?

Guidance Association, 41 Washington Ave., Pleasantville, NY 10575.

Focus on Self-Development (kit). Science Research Associates, 259 W. Erie St., Chicago, Illinois 60611.

Golden Book of Hobbies, Western Publishing Company.

Guidance Kit for Elementary Counselors and Teachers, Science Research Association, 259 Erie St. W., Chicago, Illinois 60611.

How Do You Feel? (filmstrip) Imperial Films, Set of six captioned filmstrips on feelings about being alone, school, home and family, other children, community, plants, and animals.

I Know A (series of 20 books on occupations) E. M. Hale & Co., Bos B-1473, Mpls, Minn. 55480.

Innovations in Career Development via the Curriculum. Unpublished paper, available on request. Dr. Charles W. Ryan. College of Education, University of Maine, Orono, Maine.

Innovations in the Use of Career Information (pamphlet) Sinick, D.

Introduction to Oceanography, Encyclopedia Britannica.

Job Family Series, Science Research Associates, 250 East Erie Street, Chicago, Illinois 60611 (pamphlet).

Jobs in Science, Science Research Associates, 250 East Erie Street, Chicago, Illinois 60611 (pamphlet).

Junior Guidance Series (20 booklets) Science Research Associates, 250 W. Erie St., Chicago, Illinois 60611.

Just What Do Mothers Do? (filmstrip) Edu-Craft, Inc.

K-12 Guide for Integrating Career Development into Local Curriculum. 1971. Wisconsin Department of Public Instruction, William C. Kahl, State Superintendent.

Keep Up With Your Studies Coronet Films, 10 minutes, motivates interest in doing well.

Kimberly-Clark Babysitting and Beauty Course (pamphlet) Kimberly-Clark Corporation, Box 551, Editorial Department, Neenah, Wisconsin.

Learning About Space Careers -- Grades 4-6 (pamphlet) National Aeronautics and Space Administration, U. S. Government Printing Office, Washington, D.C.

Let's Visit the Supreme Court (tape) Educational Record Sales, fourth to seventh grades.

Let's Visit the White House (tape) Educational Record Sales, third to sixth grades.

Little Red (1963) Piper, Roberta; Scribner. 4-6 grades. Book encourages learning.

Little Town U.S.A. (set of nine films) Eye Gate.

Living and Working Together (series of 4 filmstrips) Part I and II, Jam Handy.

Me, Myself, and I (series of filmstrips) Includes: How Can I Improve Myself, Where Do We Go From Here, What About Other People, Who Am I, Why Do My Feelings Change, and What Can I Do About It.

More Hands for Man: The Story of the Industrial Revolution (1960) Spencer, Cornelia; John Day Co., Inc.

Occupational Information and Guidance (pamphlet) Sinick, D.

Occupational Information in the Elementary School, Norris, (this contains a large section on Resource Materials - pp. 150-243 - this material is in categories with information about each item). Science Research Association, 259 Erie St. W., Chicago, Ill. 60611.

Occupational Outlook Handbook (1967) U. S. Department of Labor, Washington, D.C.: U. S. Government Printing Office.

Our Changing World (filmstrip) San Diego County Department of Education, Audio Visual Services. Changes that have occurred in our society.

Painted Rock to Printed Page (1960) Rogers, Frances; J. B. Lippincott Company. Occupational change over the years.

People are Different and Alike, Coronet Films.

People at Work and Other Poems. Bramblett, Agnes Cochran. Darby Printing Co., Atlanta, Georgia.

Picture Charts: Moods and Emotions, People Who Come to My House, People in the Neighborhood. Child's World, 515 N. Front St., Box 711, Mankato, Minn. 56001.

Picture Charts for Occupations, F. A. Owen Publishing Company.

Random House Program for Elementary Guidance, Random House. Set of 33 high interest books as case studies -- explores personality development.

School Series: Our School Workers McGraw-Hill, Box 402, Hightstown, N.J. 08520.

School Subjects and Jobs, Brochard, John; Science Research Associates.

Self Enhancing Education -- A Program to Motivate Learners. 1966. Randolph, Norma, and Howe, William. Stanford Press, Palo Alto, California.

So You Want to be a Scientist (pamphlet) The Continental Press, Inc., Dallas, Texas.

Student-Centered Occupational Preparation and Exploration (SCOPE). 1972. Tentative Junior High Career Guidance Curriculum, Teacher Supplement and Student Workbook. Granger, Kolene M. Utah State Board of Education, Salt Lake City, Utah.

Teaching Children Values (tape) Educational Record Sales. Utilizing problem solving techniques, this record provides children with an understanding of integrity, responsibility and love.

Teaching Practices Designed to Foster Self-Understanding. 1968. Developmental Career Guidance Project. Dr. George Leonard, Wayne State University, 324 Education, Detroit Public Schools.

Tentative Work Copy - Social Studies - Primary Grades Guide. 1969. Payne, Rebecca. Granite School District, Salt Lake City, Utah.

The American Road (film) Ford Motor Company, free loan.

The Cardboard Cow (film) U.S. Department of Agriculture, Information Office. Explains how food is produced today.

The Origin of Interests. 1964. Rowe, Anne and Siegelman, Marvin. American Personnel and Guidance Association, 1605 New Hampshire Ave., NW, Washington, DC 20009.

The Janitor's Girl Friedman, Frieda, Morrow Publishing Company.
Book stresses person's unique individuality and the contributions each person can make to a total effort.

The Wonderful World of Medicine Caeder, Peter Ritchie. Doubleday.
About health occupations.

Today's Basic Science Teacher's Edition. 1963. Navarra, John Gabriel, and Zaffaroni, Joseph. Harper and Row, Inc., Evanston, Illinois.

Triple "I" Series: I Aim, Ask and Act
I Build, Belong and Believe
I Can, Compete and Care
I Do, Dare and Dream
I Earn, Explore and Excel
I Find, Follow and Finish
Franco; American Book Company, 300 Pike St., Cincinnati, Ohio 45202.

U. S. Community and Its Citizens (21 minute film) United World Films.

Unusual Careers (1962) Meszner, Martha. Knopf, Inc.

Watchdogs of the Weather (pamphlet) Chronicle Guidance Publications, Moravia, New York.

Weather and You (pamphlet) American Educational Publications, Columbus, Ohio.

Weather Bureau at Work (pamphlet) U. S. Department of Commerce Weather Bureau, Washington, D.C., U. S. Government Printing Office.

What Could I Be? Lifton, Walter; Science Research Associates.
Introduces the world of work, guides children in viewing occupational fields in terms of their abilities and interests, and helps them see the value of school as preparation for work.

What Do Fathers Do? (filmstrip) Edu-Craft, Inc.

What I Like To Do Science Research Associates, pack of 25. Easy-to-use interest inventory for grades 4-7. Identifies preference in art, music, social studies, active play, quiet play, manual arts, home arts, and science.

What Is It Series Chicago: Benefic Press.

What Will I Be From A-Z Gelb, Donald; National Dairy Council, 111 N. Canal St., Chicago, Illinois 60606.

Where People Live and Work (filmstrip) Visual Education Consultants.

William. Ramon, Andy and Five Friends at School (filmstrips and records) Taylor Audio-visual, Box 1377, Huron, S. Dak. 57350.

Women of Destiny (8 cassette tapes) Educational Reading Services.

Inspiring stories of brave women who overcame enormous personal obstacles to lead the way for others: Helen Keller, Clara Barton, Florence Nightingale, Madame Curie, Juliette Lou, Elizabeth Blackwell, Amelia Earheart, and Betsy Ross.

Workers for the Public Welfare (filmstrip) Eye Gate House, Inc.

Develops concepts, appreciation, and understanding of many types of public employees who serve the community where they live.

World of Work (filmstrips and records) Denoyer-Geppert, Box 93550, Chicago, Illinois 60690.

World of Work (series of filmstrips) Edu-Craft, Inc. Grades 4-6 series contains 13 color-sound filmstrips illustrating skills, aptitudes, and attitudes needed to achieve in many different occupational clusters.

APPENDIXES

Appendix A

Additional Techniques for Using Occupational Information in the Elementary School

1. Radio and television programs. These can be real live programs or they can be acted out programs. The youngsters can invite some successful individual to the class or a discussion group, and then a panel of youngsters can be prepared to ask him questions about his job and his ideas, about things about his life which they might be interested in. Tape recording some of the interviews can also prove exciting to the children.
2. Prepare a color book for grades 1-3 showing people and situations in various types of jobs and the kinds of uniforms they wear on the job (firemen, policemen, doctors, dentists, nurses, soldiers, sailors, marines, engineers, mailmen, professional athletes, etc.), which the children can color.
3. Encourage the children to develop a newspaper where they can list occupations they have discussed in class, write editorials and include other items which may have significance to them to share with others in the school.
4. Develop projects which show the vocations associated with the various holidays. Example: Christmas toys made and sold, Christmas cards, the work of the mailmen and post office workers in delivering the cards and gifts to the home. All holidays

have special vocational significance.

5. Develop projects which show how various vocations are related to the seasons of the year. Example: What is involved in a wheat harvest? In getting ready for summer, dusting off the air conditioner, sharpening the lawnmower?
6. Students can be encouraged to study individuals who have made a success in more than one occupation. Such a study should help students to become aware of the fact that they can probably find success in more than one field of endeavor.
7. Promote conferences or workshops for parents to help them understand the role they are to play in the career growth and development of their children.
8. Develop a unit for parents of elementary school children which will help them understand the importance of education to their children, how the various subjects carried in the elementary school are related to occupational choice, and what their specific role would be in the career guidance process of their children.
9. Provide as many early industrial arts experiences as possible. Wood-work experiences are good for children. Perhaps a parent might offer to assist in a special project.
10. Many children might like to make a career scrapbook of their own -- gathering information from newspapers, magazines, drawing

pictures, and writing information gathered from books.

11. Games that relate to the real world of work can stimulate interest in career development (games can be developed by students and teachers) -- then the teacher can pick up where the game stops with exciting materials and techniques for teaching them.

Appendix BA Letter to Parents

School _____

Date _____

Dear Parents:

Our fourth grade class is studying about the "World of Work" -- both the school work world and the related "outside" work world.

Your job is very important to us and we would like to know how it affects our lives. Will you please answer the questions below and send the completed questionnaire back to school with _____?

Father _____

Mother _____

1. What is your job?
2. What do you do on the job? List some of your responsibilities.
3. What are some of your working conditions?
4. Do you have anything you could share with us to help us better understand your work (tools, pictures, materials, uniforms, charts, etc.)?
5. Is your place of employment a good "field trip" possibility for fourth grade level?
6. Would you be willing to visit our class and tell us about your work?
7. Other information you would like to share with us.

Thanks for your interest.

Sincerely yours,

Appendix C

Guidelines for Using Resource Persons

Objective: To meet the resource person from the world of work.

A. Initial Contact

1. Obtain the necessary background information about the person to properly present him to the class.
2. Inform the speaker of the grade level, number of students, program facilities, and equipment available.
3. Ask the speaker to comment on such things as:
 - a. Nature of the work.
 - b. Training and education requirements.
 - c. How and where training can be obtained.
 - d. Requirements.
 - e. Working hours, conditions, salary, and fringe benefits.
 - f. Job opportunities in his field.
 - g. Types of occupations in his field of work.
 - h. What satisfactions workers receive from this type of work.
4. Indicate time limit allowed to the speaker.
5. Allow time for student questions.

B. Student Preparation

1. Give the students some general knowledge of this person's field of work.
2. Discuss questions the students wish to have answered. Organize questions so that all questions can be asked without repetition.

C. Follow-up and Evaluation

1. Allow student interaction on materials presented by the speaker.
2. Each student should list what he felt were the main points presented by the speaker.

Appendix D

Guidelines for Career Development Field Trips

Objectives

1. To stimulate and motivate student interest.
2. To see work as it actually is -- awareness of:
 - a. different workers.
 - b. working conditions.
 - c. interdependence of workers.
3. To relate classroom instructional material to on-the-job performance.
4. To break the monotony of confinement to the classroom.
5. To help students to identify their school training as a stepping stone to an occupation.

Teacher Preparation

1. Permission from principal.
2. Permission from parents.
3. Transportation.
4. Contact business establishment.
 - a. Permission to come and definite date and time.
 - b. Provide information to business establishment.
 - 1) number of students.
 - 2) age, grade level, etc.
 - 3) materials previously covered by students.
 - 4) questions students may ask.

- 5) safety measures to be observed.
- c. Secure information or materials from business for students to review before going on trip.

Pupil Preparation

- 1. Secure parental permission.
- 2. Watch for:
 - a. number of workers.
 - b. working conditions.
 - c. clothes they wear -- appropriate.
 - d. safety.
 - e. Do workers seem to enjoy their work?
 - f. Do workers work alone or together?
- 3. Special instructions:
 - a. behavior on tour.
 - b. appropriate clothing.
 - c. safety practices.
 - d. courtesy throughout tour.
 - e. departure time.

Follow-up and Evaluation

Remember that industry has to give of its time and energy to make the trip a success. A thank you note is appropriate.

- 1. Did you enjoy the trip?
- 2. Would you recommend the trip for others? Why?
- 3. Were all questions answered?
- 4. How many kinds of work did you observe?

5. Did you observe any kind of work you would enjoy doing?
6. What do you know, now, that you did not know before the tour?
7. What characteristics do you have that would be valuable in
this work?
8. What must you improve on if you were to go into this line
of work?

Appendix E

What is a Value? (Granger, 1972)

Values are general guides to behavior giving direction to life.

Different experiences would give rise to different values; therefore, any one person's values would be modified as his experiences accumulate and change.

The following are processes which are effective for obtaining values. If one has used these processes in obtaining a value, then he possesses a true value:

1. Choosing from alternatives.
2. Choosing after careful consideration of the consequences of each alternative.
3. Choosing freely.
4. Prizing, being glad of one's choice.
5. Prizing, being willing to publicly affirm one's choice.
6. Acting upon one's choice, incorporating choices into behavior.
7. Acting upon one's choice repeatedly, over time, even to the point of acting upon the choice subconsciously, freely, and spontaneously.

One must reflect and choose if values are to emerge. Values must develop out of personal choices.

Appendix F

Selected Careers Related To Education Levels and Subjects

(Granger, 1972)

Selected Careers Related to Agricultural Science

Levels	Service	Business Clerical and Sales	Science and Technology	Outdoor	General Cultural	Arts and Entertain- ment
I Bachelor's Degree or Above	-Vocational Agricultural Teachers -County Agent	-Agriculture Broker -Appraiser (Farm) -Home Demon- stration Agent	-Agricultural En. -Soil Scientist -Veterinarians -Ecologist -Horticulturist -Plant Physiolo- gist	-Agronomist -County Agent -Forester	-University Teacher (Agriculture) -Agricultural Journalist -Landscape Arch. -Farm Broadcast.	
II H.S. Plus Technical		-Feed Salesman -Implement Dealer -Realtor (Farm) -Auctioneer	-Plant Quarant- ine Inspector -Farm Mech. -Artificial Inseminator	-Nurseryman -Apiarist -Floracul- turst -Dairy Tester		
III H.S. Gradu- ate			-Butter Churner -Butter Maker -Cheese Maker -Blacksmith -Butter Grader	-Landscape Gardner -Farmer: Dairy Fruit General Grain Livestock Vegetable -Herdsman		-Show Horse Exhibitor
IV Less than H.S. Graduate	-Agriculture Aide	-Grain Sampler -Grain and Elevator Worker	-Butchers -Butter Cutter -Meat Curer -Egg Grader -Greenhouse Worker -Butter Wrapper	-Dairy Hands -Farm Laborers -Fire Guard		-Lead Pony Boy

Selected Careers Related to Mathematics

Levels	Service	Business Clerical and Sales	Science and Technology	Outdoor	General Cultural	Arts and Entertain- ment
I Bachelor's Degree or Above	-Corp. State- ment Analyst -Reorganiza- tion Advisor -Tax Expert -Marketing Expert -Psychometr.	-Investment Advisor -Banker -System Analy. -Comp. Progr. -Econometric. -Bursar -Account., Pub -Statistician -Actuary	-Astronomer -Physicist -Mathematician -Engineer, Electrical, etc. -Research	-Navigator -Civil Engineer	-Economist -Teacher, Mathematics -Sociometrician	-Architect
II H.S. Plus Technical	-Tax Collector -Airplane Inspector	-Collection M. -Appraiser -Auditor -Bank Examin. -Office Mgr. -Sales Mgr.	-Contractor -Machine Design. -Radio Operator -Draftsman -Tool Designer -Optometrist -Lab Assist.	-Surveyor		-Motion Pictures (Audio)
III H.S. Graduate	-Assessor -Actuarial Assistant	-Stat. Clerk -Cashier -Bookkeeper -Ticket Agent -Broker Clerk -Cost Clerk -Budget Clerk -Sec. to Acct -Teller -Billing Clk.	-Tool Maker			
IV Less Than H.S. Graduate		-Card Punch Operator -Comp. Operat. -Sales Clerk				

Selected Careers Related to English and Language Arts

Levels	Service	Business Clerical and Sales	Science and Technology	Outdoor	General Cultural	Arts and Entertain- ment
I Bachelor's Degree or Above	-Reading Specialist -Speech Therapist	-Advertising Mgr. -Public Rela. -Sales Engr. -Traffic Mgr.	-Technical Writer	-Sports Writer	-Lawyers -Editor -Clergyman -English and Language Arts Teacher -Foreign Corres. -Tutor -Journalist	-Lecturer -Author -Continuity Writer -Actor -Dramatic Critic -Scenario Writer
II H.S. Plus Technical	-Interpreter -Translator	-Retail Mgr. -Salesman -Sales Person -Secretary	-Cryptographer		-Radio Announc. -Reporter -Librarian	-Script Writer
III H.S. Graduate	-Customs Inspector -Immigration Inspector	-Auctioneer -Demonstrator -Buyer -Floorwalker -Sales Clerks -Foreign Exchange Clerk -Stenographers	-Telephone Operator -Printer			-Copywriter
IV Less Than H.S. Graduate	-Hostess -Usher				-Proofreader	

Selected Careers Related to Music

Levels	Service	Business Clerical and Sales	Science and Technology	Outdoor	General Cultural	Arts and Entertain- ment
I Bachelor's Degree or Above		-Impresario -Music Store Manager			-College Music Teacher -High School Music Teacher	-Composer -Chorus Mgr. -Conductor -Choir Master -Music Crit. -Concert Master -Opera Singer -Orchestrat.
II H.S. Plus Technical		-Salesman, Music and Musical Instruments			-Music Teacher, Private	-Arranger -Music Lib- rarian -Organist -Pianist -Violinist -Accompanist
III H.S. Graduate		-Sales Clerk, Music Store	-Musical Instrument Repairman -Organ Tuner -Piano Repairman -Piano Stringer -Piano Tuner -Violin Maker -Violin Repairman			-Instrument Musician
IV Less Than H.S. Graduate						-Stage Hands

Selected Careers Related to Science

Levels	Service	Business Clerical and Sales	Science and Technology	Outdoor	General Cultural	Arts and Entertain- ment
I Bachelor's Degree or Above	-Occupational Therapist -Psychologist -Psychiatrist -Dietician	-Sales Engineer -Manufacturing Electronic Equipment	-Anthropologist -Chemist -Med. Technolog. -Astronau. Engr. -Physicist -Engineer -Mathematician -Physician -Biologist -Botanist -Veterinarian -Pharmacist -Nurse -Dentist -Chiropractor	-Agronomist -Wildlife Specialist -Range Mgmt. Specialist -Horticultur. County Agent -Landscape Architect	-Curator -Science Teacher -Physical Education Teacher	
II H.S. Plus Technical	-Mortician	-Pharmaceut. Salesman -Med. Secre. -Chem. Sec. -Salesman, Scientific -Supplies & Equipment	-Bio Research A. -Dental Tech. -Dental Hygien. -Med. Techni. -Optometrist -Weather Observ. -Practical Nurse -Embalmer	-Floricult. -Nurseryman -Tree Surgeon -Fish Culturist -Soil Conser. vationist		-Botanical Artist
III H.S. Graduate			-Taxidermist -Glass Blower -Dry Cleaner -Text. Tech. -Lab. Tech.	-Landscape Gardner -Poultryman -Truck Gardi. -Apiarist		
IV Less Than H.S. Graduate			-Veter. Hosp. Attendant -Zoo Caretaker -Nurse's Aide	-Lumber Inspector -Nursery Employees		-Animal Trainer -Photograph Technician

Selected Careers Related to Social Studies

Levels	Service	Business Clerical and Sales	Science and Technology	Outdoor	General Cultural	Arts and Entertain- ment
I Bachelor's Degree or Above	-Social Worker -Psychologist -FBI Agent -Counselor -YMCA Sec. -Clergyman	-Gov. Official -Industrial Executives -Economist -Market Analyst -Buyer -Arbitrator	-Archaeologist -Paleontologist -Anthropologist		-Judges -Lawyers -Philologist -Editor -Sociologist -News Commentator -Reporter -Librarian -Justice of the Peace	-Museum Curators -Historian (Dramatic Arts)
II H.S. Plus Technical	-Police Sergeant -Detective -Sheriff -Employment Interviewer	-Union Offi- cial -Bank Teller -Salesman -Wholesaler -Retailer			-Law Clerks -Radio Announcers	-Tour Conductor -Travel Bureau Director -Cartoonist
III H.S. Graduate	-Policeman -Religious Worker -Bus Driver	-Floor Walker -Interviewer (Poll) -House Canvas- sers & Agent			-Library Assistant	-Museum Guide
IV Less Than H.S. Graduate	-Train Porter -Taxi Driver -Bellhop -Elev. Oper. -Usher	-Peddlers -Newspaper Boy			-Library Page -Copy Boy	

Selected Business and Distributive Careers

Levels	Service	Business Clerical and Sales	Science and Technology	Outdoor	General Cultural	Arts and Entertain- ment
I Bachelor's Degree or Above	-Employment Manager -Personnel Manager	-C.P.A. -Broker -Auditor -Controller -Credit Mgr. -Office Mgr. -Market Spec. -Account. Bnk	-Telephone Engr. -Data Processing System Analyst -System Engin.		-College Teacher -Commercial High School Teacher -Journalist	
II H.S. Plus Technical		-Purchas. Agt -Secretary -Paymaster -Bank Teller -Salesman -Dept. Store Buyer	-Contractor- General -Medical Records Librarian		-Law Clerk	
III H.S. Graduate	-Telegrapher -Telegraph Agent -RR Conductor -Postal Work -Telephone Operator	-Bookkeeper -Cashier -Stenographer -Credit Clerk -Sales Clerk -Office Work -Station Agnt -Dispatcher -Typist -Bill. Mach. -Receptionist -File Clerk	-Tabulating Machine Operator -Programmer			
IV Less Than H.S. Graduate	-Census Taker -Rural Mail Carrier -Elevator Op.	-Stock Clerk -Multi. Opr. -Messenger Boy -Collector -Office Boy		-House to House Salesman		

Selected Careers Related to Home Economics

Levels	Service	Business Clerical and Sales	Science and Technology	Outdoor	General Cultural	Arts and Entertain- ment
I Bachelor's Degree or Above	-Homemaker Consultant	-Home-Service Represent. -Journalist -Food Ser. Mgr -Test Kitchen Researcher -Ext. Service Specialist -Buyer	-Dietician -Food Chemist -Research Worker		-Homemaker -Home Economics Teacher -Home-Extension Agent -Advertising Photographer -Public Health Official	-Fashion Designer -TV Demon- strator -Interior Designer -Textile Designer
II H.S. Plus Technical	-Chef or Cook -Caterer -Clothing Alteration Specialist -Child Care Assistant	-Food Salesm. -Comparison Shopper	-Meat and Dairy Inspector -Baker		-Homemaker	-Decorator Assistant
III H.S. Graduate	-Hotel Housekeeper -Beautician		-Dressmaker -Tailor -Upholsterer -Lab Assistant		-Homemaker -Teacher Aide	-Cake Decorator -Display Assistant
IV Less Than H.S. Graduate	-Alt. Seamstr. -Food Ser. Wkr -Nurse Maid -Hotel Aide -Homemaker Assistant -Clothing Care Service -Waitress -Babysitter		-Baker Helper -Meat Cutter -Dry Cleaner Assistant -Garment Factory Worker		-Homemaker	

Selected Careers Related to Industrial Education

Levels	Service	Business Clerical and Sales	Science and Technology	Outdoor	General Cultural	Arts and Entertain- ment
I Bachelor's Degree or Above		-Sales Engin.	-Mechanical Engr. -Electrical Engr. -Aero. Engr. -Air Cond. Engr. -Automotive Engr. -Civil Engr. -Indust. Chemist -Ceramic Engr.		-Edit. of Indust. Publications -Reporter Indust. Publications -Teacher Indust. Arts -Writer of Indust Publications	
II H.S. Plus Technical	-Radio and TV Repairman	-Contractor -Building Trades	-Elect. Assemb. -Technician -Airplane Pilot -Factory Forem. -Boiler Inspect. -Radio Operator -Die Designer -Draftsman -Auto-Die. Mech		-Vocational Instructor -Printer	
III H.S. Graduate		-Telephone Inspector	-Machinist -Airplane Mech. -Blacksmith -Boilermaker -Bookbinder -Bricklayer -Cabinetmaker -Carpenter -Welder -Photoengraver	-Crane Oper. -Oil Well Driller -Lineman -Operating Engineer	-Linotype Oper. -Compositor	-Photograph- er
IV Less Than H.S. Graduate	-Bus Driver -Chauffer -Dray Man -Truck Driver -Custodian -Bldg. Clean -Maint. Man -Gas St. Att.	-Multigraph Operator	-Armature Winder -Assembler -Babbitter -Blast Furn Op. -Brake Adjuster -Leather Worker -Airplane Clean -Blaster -Mach. Operatory	-Lumber Inspector -Tractor Driver -Stationary Engineer		-Photo- Technician

Selected Careers Related to Foreign Languages

Levels	Service	Business Clerical and Sales	Science and Technology	Outdoor	General Cultural	Arts and Entertain- ment
I Bachelor's Degree or Above	-Diplomat -Curator -Missionary	-Tour Conduct. -Commercial Attache -Branch Mgr. Airways Corp.	-Translator of Tech. Writings -Physician -Nurse -Engineer -Geologist -Archeologist -Architect -Pharmacist		-College Language Teacher -Writer Foreign Language Paper -Foreign Correspondent -High School Language Teacher	-Opera Singer -Critic -Actor, Actress
II H.S. Plus Technical	-Language Librarian -Steward or Stewardess -Receptionist	-Dealer, Foreign Books -Sec., Bilin. -Travel, Bureau Mgr. -Foreign Ser. Worker -Fashion Buy.	-Wireless Operator -Researcher		-Broadcaster	-Art Collec- tor
III H.S. Graduate	-Interpreter -Translator -Customs Inspector -Immi. Insp. -Traveling Companion	-Foreign Clerk -Foreign Col. Clerk -Exporter -Importer		-Policeman		
IV Less Than H.S. Graduate	-Hotel Worker	-Hotel Clerk -Armed Forces -Merch. Marine -Information, Aide Courier		-Taxi Driver		

Appendix GRandom List of Occupations (Granger, 1972)Service

Reading Specialist	Sheriff
Babysitter	Building Cleaner
Vocational Agricultural Teacher	Food Service Worker
Interpreter	Customs Inspector
Translator	Railroad Conductor
Alteration Seamstress	Census Taker
Assessor	Psychologist
Mortician	Psychiatrist
Agriculture Aide	Police Sergeant
Tax Collector	Bellhop
Psychometrist	Tax Expert
County Agent	Diplomat
Hostess	Rural Mail Carrier
Speech Therapist	Postal Worker
Waitress	Hotel Housekeeper
Homemaker Consultant	Nurse Maid
Child Care Assistant	Marketing Expert
Beautician	Detective
Social Worker	Chef or Cook
Bus Driver	Train Porter
Employment Manager	Customs Inspector
Telephone Operator	Receptionist
Immigration Inspector	Chauffer
Hotel Worker	Telegraph Agent
Gas Station Attendant	Policeman
Radio and TV Repairman	Clergyman
Airplane Inspector	Taxi Driver
Traveling Companion	Hotel Aide
Telegrapher	Clothing Care Service
Elevator Operator	Curator
Personnel Manager	Steward or Stewardess
Usher	Religious Worker
FBI Agent	Truck Driver
Custodian	Maintenance Man
Employment Interviewer	

Business Clerical and Sales

Telephone Inspector	Card Punch Operator
Peddler	Investment Advisor

Business Clerical and Sales (Continued)

Newspaper Boy	Statistician
Messenger Boy	Multigraph Operator
Wholesaler	Office Manager
Hotel Clerk	Broker
Stenographer	Cashier
Sales Engineer	Secretary
File Clerk	Salesman
Office Boy	System Analyst
Sales Clerk	Statistical Clerk
Bank Examiner	Credit Clerk
Armed Forces	Stock Clerk
Union Official	Office Manager
Manufacturing Electronic Equipment	Accountant, Public
Floor Walker	Grain and Elevator Worker
Market Analyst	Foreign Exchange Clerk
Sales Engineer	Dealer, Foreign Books
Contractor	Medical Secretary
Home-Service Representative	Chemical Secretary
Banker	Industrial Executive
Appraiser	Interviewer (Poll)
Computing Machine Operator	Feed Salesman
Music Store Manager	Implement Dealer
Government Official	Home Demonstration Agent
House Canvasser and Agent	Purchasing Agent
Tour Conductor	C.P.A. (Accountant)
Merchant, Marine	Billing Machine Operator
Auctioneer	Collector
Advertising Manager	Information, Aide Courier
Grain Sampler	Exporter
Realtor (Farm)	Importer
Fashion Buyer	Bookkeeper
Foreign Service Worker	Cashier
Retail Manager	Journalism
Traffic Manager	Food Service Manager
Office Worker	Sales Manager
Bank Teller	Typist
Extension Service Specialist	Auditor
Buyer	Computer Programmer
Foreign Collection Clerk	Test Kitchen Researcher
Travel Bureau Manager	Secretary, Bilingual
Retailer	Station Agent
Demonstrator	Paymaster
Accountant Banker	Billing Clerk
Department Store Buyer	

Arts and Entertainment

Art Collector	Concert Master
Actor, Actress	Fashion Designer

Arts and Entertainment (Continued)

Stage Hand
 Orchestrator
 Composer
 Motion Pictures (Audio)
 Architect
 Photo-technician
 Decorator Assistant
 Textile Designer
 Botanical Artist
 Photographic Technician
 Museum Curator
 Cartoonist
 Show Horse Exhibitor
 Lead Pony Boy
 Lecturer
 Script Writer
 Critic
 Opera Singer
 Arranger
 Music Librarian
 Instrument Musician

Cake Decorator
 Photographer
 Artist
 Historian (Dramatic Arts)
 Tour Conductor
 Travel Bureau Director
 Animal Trainer
 Display Assistant
 Organist
 Pianist
 Conductor
 Author
 TV Demonstrator
 Interior Designer
 Museum Guide
 Violinist
 Accompanist
 Continuity Writer
 Chorus Master
 Choir Master

Outdoor

Oil Well Driller
 Stationary Engineer
 Agronomist
 Fish Culturist
 Nursery Employee
 Fire Guard
 Farmer: Dairy, Fruit, General,
 Grain, Livestock,
 Vegetable
 House to House Salesman
 Navigator
 Surveyor
 Policeman
 Sports Writer
 Taxi Driver
 Crane Operator
 Lumber Inspector
 Wildlife Specialist
 Poultryman
 Landscape Architect

Apiarist
 Herdsman
 Farm Laborer
 Civil Engineer
 Lineman
 Tractor Driver
 Nurseryman
 Tree Surgeon
 Truck Gardener
 Operating Engineer
 County Agent
 Landscape Gardener
 Dairy Tester
 Range Management Specialist
 Horticulturist
 Floraculturist
 Soil Conservationist
 Forester
 Dairy Hand

General Cultural

University Teacher (Agriculture)
 Law Clerk
 Curator
 Library Page
 Radio Announcer
 Linotype Operator
 Homemaker
 Public Health Official
 Economist
 College Music Teacher
 Lawyer
 Librarian
 Broadcaster
 High School Language Teacher
 Agricultural Journalist
 College Teacher
 Physical Education Teacher
 Science Teacher
 Judge, Justice of the Peace
 Library Assistant
 Home Economics Teacher
 Teacher's Aide
 Vocational Instructor
 Composer
 Public Health Official
 Private Music Teacher

Printer
 Copy Boy
 Commercial High School Teacher
 Journalist
 Landscape Architect
 Farm Broadcaster
 Editor
 Sociologist
 Teacher of Industrial Arts
 Home-Extension Agent
 Advertising Photographer
 News Commentator
 Reporter
 Clergyman
 Sociometrician
 Tutor
 Radio Announcer
 Proofreader
 English, Language Arts Teacher
 Writer, Foreign Language Paper
 College Language Teacher
 High School Music Teacher
 Mathematics Teacher
 Foreign Correspondent
 Journalist

Science and Technology

Musical Instrument Repairman
 Violin Repairman
 Physician (Doctor)
 Researcher
 Radio Operator
 Astronomer
 Technical Writer
 Nurse's Aide
 Laboratory Technician
 Chiropractor
 Veterinarian
 Anthropologist
 Auto-Diesel Mechanic
 Bookbinder
 Automotive Engineer
 Brake Adjuster
 Meat and Dairy Inspector
 Laundry Worker
 System Engineer
 Programmer

Piano Stringer
 Physicist
 Geologist
 Telephone Operator
 Dental Technician
 Zoo Caretaker
 Embalmer
 Medical Technologist
 Archaeologist
 Blacksmith
 Mechanical Engineer
 Leather Worker
 Garment Factory Worker
 Dietician
 Cheese Maker
 Horticulturist
 Tabulating Machine Operator
 Telephone Engineer
 Piano Repairman
 Violin Maker

Science and Technology (Continued)

Butter Wrapper	Contractor
Artificial Inseminator	Mathematician
Plant Physiologist	Translator of Technical Writings
Organ Tuner	Wireless Operator
Engineer, Electrical, etc.	Printer
Tool Maker	Anthropologist
Nurse	Chemist
Pharmacist	Textile Technician
Cryptographer	Dental Hygienist
Biological Research Aide	Elect. Assembler Technician
Engineer	Civil Engineer
Veterinary Hospital Attendant	Airplane Cleaner
Dry Cleaner	Radio Operator
Botanist	Die Designer
Paleontologist	Dressmaker
Welder	Tailor
Ceramic Engineer	Meat Cutter
Airplane Pilot	Meat Curer
Machine Operator	Agricultural Engineer
Baker	Contractor-General
Research Worker	Data Processing System Analyst
Medical Records Librarian	Architect
Butter Churner	Upholsterer
Butter Maker	Glass Blower
Butter Grader	Taxidermist
Greenhouse Worker	Optometrist
Biologist	Aeronautical Engineer
Medical Technician	Carpenter
Draftsman	Butcher
Food Chemist	Machine Designer
Electrical Engineer	Tool Designer
Photoengraver	Farm Mechanic
Blast Furnace Blower	Air Conditioning Engineer
Egg Grader	Dentist
Ecologist	Bricklayer
Draftsman	Cabinetmaker
Lab Assistant	Weather Observer
Soil Scientist	Bioler Inspector
Industrial Chemist	Astronautic Engineer
Assembler	Boilermaker
Draftsman	Airplane Mechanic
Blaster	Factory Foreman
Practical Nurse	Butter Cutter
Machinist	

VITA

Barbara Payne Milner Southwick

Candidate for the Degree of

Master of Education

Seminar Report: The Development of Career Activities for Fourth Grade Students

Major Field: Counseling and Guidance

Biographical Information:

Personal Data: Born at Virden, New Mexico, November 7, 1923, daughter of Ezra Curtis and Emily Lucinda Mortensen Payne; married Leon Ross Milner June 1, 1942 (Leon deceased, April 8, 1945); two children -- Robert Seaton and Stanley Leon; married Don Broadbent Southwick December 2, 1946; one child -- Phillip "D", and one stepson -- Tracy Lewis Southwick.

Education: Attended elementary school in Virden, New Mexico; attended high school in Lordsburg, New Mexico, Virden, New Mexico; graduated from Shelley High School, Shelley, Idaho in 1941; attended Brigham Young University, Provo, Utah in 1941-42, 1957-58; received a Bachelor of Science degree from Utah State University with a major in Elementary Education in 1961; completed requirements for Utah state counseling certificate, 1967; completed requirements for the Master of Education degree in Psychology (Counseling and Guidance) at Utah State University in 1972.

Professional Experience: 1961 to 1969, elementary school teacher, Box Elder School District, Brigham City, Utah; 1969 to present, elementary school counselor, Box Elder School District.